

WTMC/WTXD GAS & ELECTRIC DRYER TRAINING MANUAL

BOSCH

SIEMENS

2nd Edition/Revision 0 (5/7/04)

WTMC/WTXD Training Program

- Features and Benefits
- Product Description
- Warranty
- Installation
- Operation
- Disassembly
- Reassembly
- Wiring Diagram
- Service Tips





This manual introduces the S line of dryers, the high tech leader worldwide.

Features and Benefits

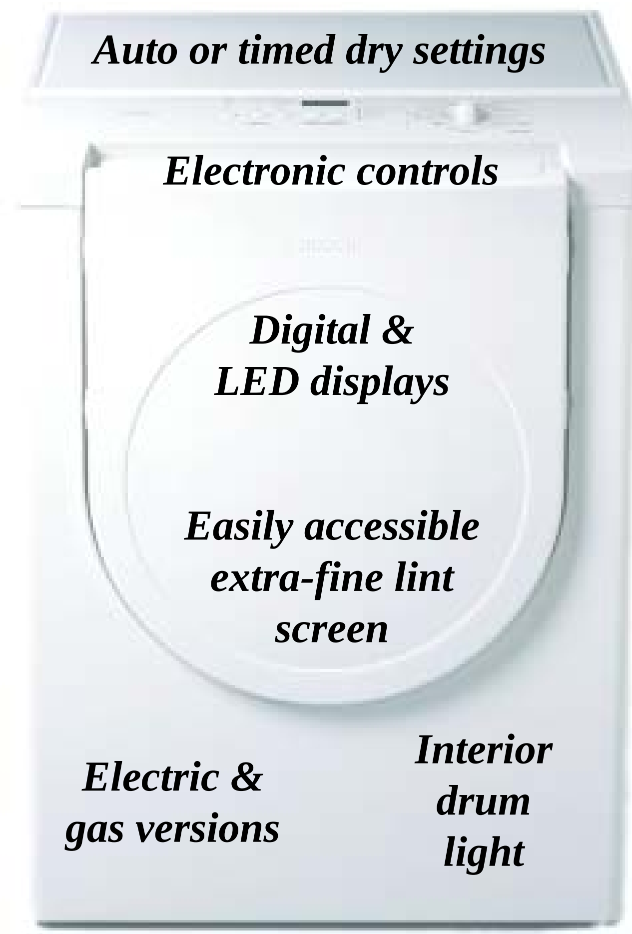
- Drying rack for sweaters & shoes (standard on WTMC63/65, WTXD83/85 & optional on WTMC33, WTXD53).
- Smooth stainless steel drum - won't rust & is gentle to clothes.
- Auto-dry with digital moisture sensor and 2 temperature sensors.
- Moisture and temperature sensors automatically determine when laundry is dry, preventing over-drying and damaging clothing.
- Vented dryers (more efficient than condensation dryers)
- Regular/Cotton - 4 settings
- Permanent Press - 3 settings
- Empty drum detection
- UL listed (U.S. & Canada)



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Product Description

- Electronic controls
- *Regular/Cotton*, *Permanent Press*, *Delicates & Air Fluff* settings
- Stainless steel drum
- Drying rack
- Extra-fine lint screen
- Digital and LED displays
- Adjustable end of cycle signal
- Vented dryers
- Interior drum light
- Electric (WTMC33/63, WTXD53/63) and gas (WTMC65/WTXD85) versions
- Empty drum detection
- UL listed (U.S. & Canada)



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Warranty



Bosch & Siemens Dryers Limited Lifetime Warranty

Statement of Limited Warranty

The warranties provided by BSH Home Appliances ("Bosch” & “Siemens") in this Statement of Warranties apply only to Bosch & Siemens clothes dryers sold to the first using purchaser by Bosch & Siemens or its authorized dealers, retailers or service centers in the United States or Canada. The Warranties provided herein are not transferable, and take place from date of installation or ten business days after delivery date, whichever comes first.

1 Year Full Limited Warranty

Bosch & Siemens will repair or replace, free of charge, any component part that proves defective under conditions of normal home use, labor and shipping costs included. Warranty repair service must be performed by an authorized Bosch or Siemens Service Center.

2 Year Limited Warranty

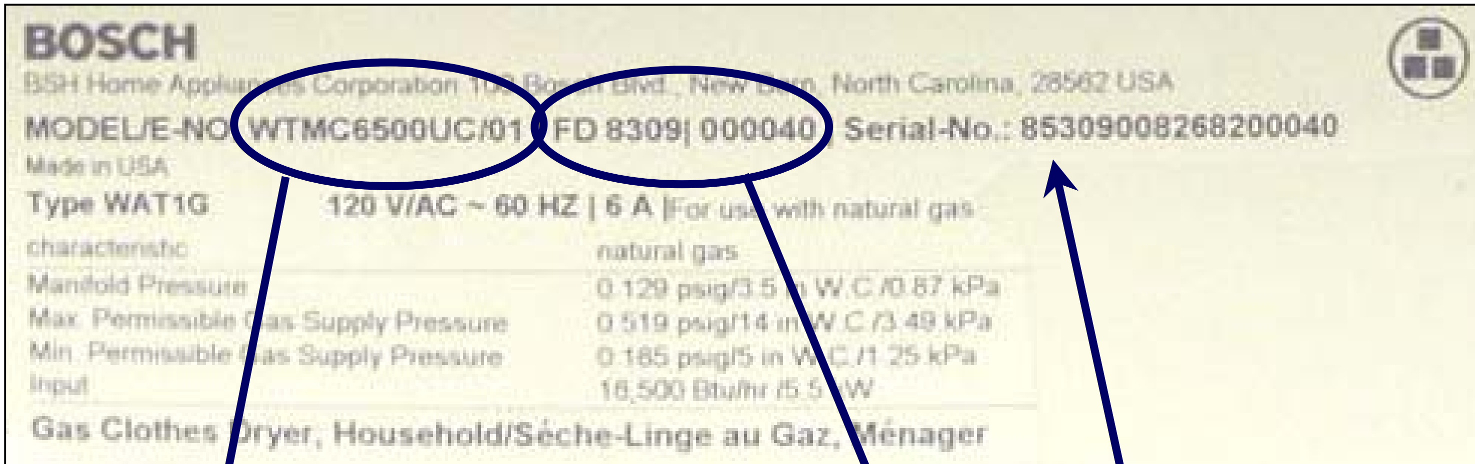
Bosch & Siemens will provide replacement parts, free of charge, for any component part that proves defective under conditions of normal home use, shipping costs included, labor charges excluded.

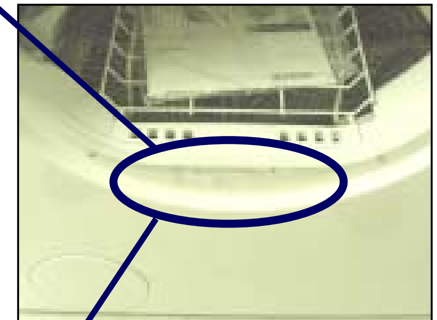
For location of nearest repair depot call 1-800-944-2904 from 5:00 AM - 5:00 PM M-F (Pacific time)

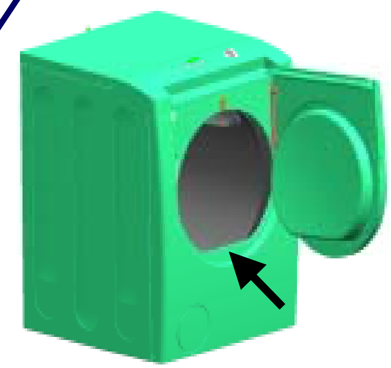
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Warranty -- Serial # Label

The serial # label, located on the front panel in front of the lint screen, shows necessary warranty information. Open the door to view the label.







<u>Model #</u> - "WTMC6500UC/01"

<u>Warranty Serial #</u> - "FD 8309". To find when the product type was built, add 20 to the 1st two digits to get the year (83 + 20 = 103 product type was built in 2003). The last two digits show the month (09 = September).

<u>Factory serial #</u> - Can convert factory serial # to FD # for warranty use. 1st 2 digits show factory # (85 = New Bern laundry), 3rd digit shows year (3 = 2003), 4th & 5th digits show month built (09 = September). So, serial # starting with "853090…00040" = dryer built @ New Bern with FD 8309 000040.

Installation – Gas Dryer Installation Instructions (1)

INSTALLATION INSTRUCTIONS

Introduction

Read these installation instructions completely and carefully. They will save you time and effort and help to ensure optimum dryer performance. Be sure to observe all listed warnings and cautions.

These installation instructions are intended for use by qualified installers. In addition to these instructions the dryer must be installed:

- In the **U.S.A.**, in accordance with the National Electric Code, ANSI/NFPA70 – latest edition/State and Municipal codes and/or local codes.
- In **Canada**, in accordance with the Canadian Electric Code C22.1 – latest edition/Provincial and Municipal codes and/or local codes.

The gas installation must conform with local codes, or in absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or the CAN/CSA-B149.1, Installation Codes.

NOTE: Be sure to follow all national & local codes.

Information concerning waste disposal

Disposal of the packaging

⚠ DANGER! ⚠

Keep children away from shipping carton and packaging components. Danger of suffocation from plastic foil and folding cartons.

All packaging materials are environmentally friendly and can be reused. Please dispose of packaging in an environmentally friendly manner.

Please ask your dealer or inquire at your local authority about current means of disposal.

Disposal of the old appliance

⚠ DANGER! ⚠

If appliance is no longer usable, pull out mains plug, cut off power cord and discard with mains plug.

To prevent children from locking themselves in the appliance, remove the door.

Old appliances are not worthless rubbish! Valuable raw materials can be reclaimed from environmentally conscious recycling.

Please ask your dealer or inquire at your local authority about current means of disposal.

Before installing the dryer

Unpacking the appliance

⚠ WARNING! ⚠

The dryer is very heavy. Do not lift it by yourself. Do not lift the appliance by projecting components (e.g. door) – due to risk of breakage.

⚠ CAUTION ⚠

Remove the appliance packaging carefully to prevent damage to the surfaces.

Check the dryer for transportation damage. Do not connect a dryer which is visibly damaged. If in doubt, contact your dealer.

Supplied components

⚠ CAUTION ⚠

After removing the packaging, immediately remove any objects from the drum.

The dryer is delivered as a complete unit. The operating instructions and supplied accessories can be found in the drum.

Installation location

⚠ WARNING! ⚠

Do not install the dryer:

- outside closed rooms,
- in an environment with dripping water,
- near flammable materials,
- in rooms which are at risk of frost,
- in the garage,
- in rooms which may contain gas or other fuels,
- in cupboards with lockable doors or in alcoves.
- with other fuel–burning appliance in the same closet.

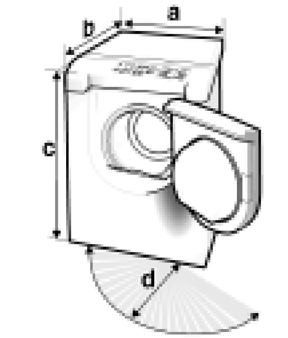
The installation room must be well ventilated, otherwise the dryer will operate below optimum performance.

Do not operate the dryer at temperatures above 104°F (40°C) and below 41°F (5°C). Low temperatures affect the automatic program sequence and may prolong the drying times.

The installation surface for the dryer must be clean, level and firm. Do not install the appliance on carpets! Compensate for uneven floors with the height-adjustable feet.

Install the dryer level. Use a spirit level. Never remove the height-adjustable feet!

The size of the installation area depends on the dimensions of the dryer. Ensure that there is adequate room for the swivel range of the door!



	Dimension	Weight
a	27.0" (686 mm)	125 lbs (56 kg)
b	31.8" (808 mm)	with packaging
c	37.2" (945 mm)	
d angle	19.7" (500 mm)/ 170 – 180°	143 lbs (64 kg)

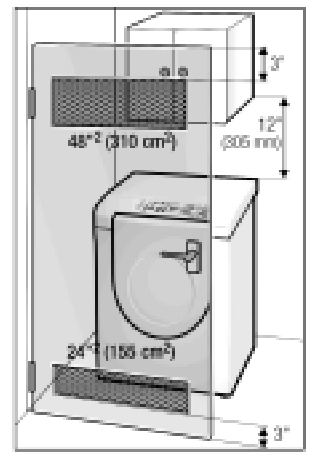
If installing the dryer in a closet, observe the minimum distances according to the following table:

Minimum Installation Clearances

	Closet
Sides	0" (0 mm)
Top	12" (305 mm)
Rear	0" (0 mm)

Important information concerning minimum distances:

- Depending on the location of the exhaust air connection, an additional minimum distance of 5½ inch (14 cm) must be provided on this side for pipes/brackets (see page 9).
- Distances above the indicated minimum dimensions reduce the risk of mold formation behind the appliance.
- Additional distances reduce noise transmission.
- Additional distances facilitate installation and service.
- If the dryer is installed in a small room, the doors of the room must be fitted with vents of a specified minimum size. Please contact our customer service for the required minimum vent sizes.



The dryer door is delivered with hinges on the right. If required, the door hinges can be switched to the left side.

If the door hinges are to be changed over, please contact your dealer or our customer service–team (see page 27).

CAUTION: When moving a dryer, screw in the feet (leveling legs) first so they won't be damaged.

NOTE: Dryers must be installed on level, solidly constructed floors.

NOTE: Don't install dryers in closets with solid wooden doors as dryers must have make-up air.

Installation -- Gas Dryer Installation Instructions (2)

Electrical connection

GROUNDING INSTRUCTIONS

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electrical shock by providing a path of least resistance for the electric current.
This appliance features a cord with an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which has been properly installed and grounded in accordance with all local regulations and ordinances.

⚠ DANGER ⚠

Improper connection of the equipment grounding conductor may result in electric shock. Have the appliance checked by a qualified electrician or service technician if you are in doubt as to whether the dryer has been properly grounded.

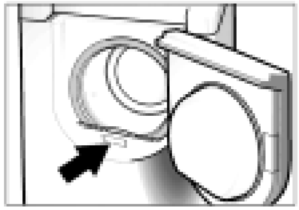
Do not modify the plug provided with the appliance – if it will not fit in the outlet, have a proper outlet installed by a qualified electrician.

⚠ WARNING ⚠

The dryer must only be connected to an individual branch circuit via a socket which has been properly installed and grounded.

The household electrical voltage must correspond to the voltage specification on the dryer (rating plate).

You will find the rating plate on the inside of the front panel.



Connection specifications as well as the required fuses are stipulated on the appliance nameplate.

Volts	Hertz	Amperes	Watts
110–120	60	15	1350 (max.)

Make sure that:

- the power cord plug fits into the socket.
- the power cord is acceptable for use in this application.
- the grounding system is properly installed.

The power cord may be replaced by an electrician only. Replacement power cords are available from Customer Service.

CAUTION: Dryers must be grounded to reduce the risk of shock.

Gas connection

⚠ DANGER ⚠

Explosion hazard!

Use a new AGA or CSA approved gas supply line.

Install a shut-off valve.

Securely tighten all gas connections.

Have a qualified person make sure gas pressure does not exceed 10.5 in. W.C./ 2.62 kPa / 0.379 psig.

Example of a qualified person include:

- licensed heating personnel,
- authorized gas supplier personnel,
- authorized service personnel.

Failure to do can result in explosion or fire.

Risk of death or injury!

All gas line connection must be tested for leaks prior to appliance operation. Apply soapy water to gas line connections and check for formation of new bubbles. Bubbles indicate leak!

When installing the gas supply to the gas dryer inlet pipe, do not exceed 310 lbf in (35 Nm).

⚠ DANGER ⚠

Never use an open flame to test for gas leaks.

Gas type

This dryer is equipped for use with NATURAL GAS.

Your dryer must have the correct valve for the type of gas in your home. Valve information is located on the rating plate behind the door below the port hole.

If the rating-plate information does not agree with the type of gas available, contact your dealer or our costumer service team (see page 27).

Gas supply line

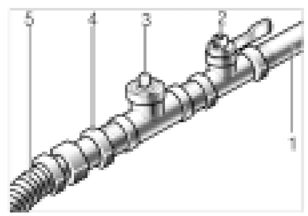
1/2" I.D. pipe is recommended.

3/8" approved tubing is acceptable for lengths under 20 ft (6.1 m) if local codes and gas supplier permit.

Must include 1/8" NPT plugged tapping, immediately upstream of the gas connection.

A shut off valve must be included:

- **USA:** An individual manual shut–off valve must be installed within 6 ft (1.8 m) of the dryer in accordance with the National Fuel Gas Code, ANSI Z223.1.
- **Canada:** An individual manual shut–off valve must be installed in accordance with the B149, Installation Codes, CAN/CSA B149.1 and CAN/CSA B149.2. It is recommended that an individual manual shut–off valve be installed within 6 ft (1.8 m) of the dryer.



1 – 1/2" NPT gas supply line
2 – Gas shut–off valve
3 – 1/8" NPT plugged tapping
4 – 3/8" pipe to flare adapter fitting
3 – 3/8" flexible gas connector (to the dryer)

The shut–off valve should be easy to reach for opening and closing.

Dryer gas pipe

The gas pipe that comes out trough the rear of the dryer has a 3/8" male pipe thread.

Connection of the dryer

⚠ CAUTION ⚠

Connection must be made by a qualified technician.

The dryer must be disconnected from the gas supply piping system during testing pressure.

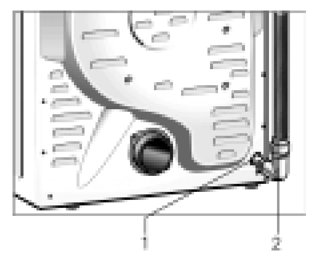
When using for the first time make sure that there is no air in the piping system.

⚠ WARNING ⚠

Do not use copper pipes and tubing if connected to natural gas.

The connection may be different, according to the supply line type, size and location.

If local codes permit, use a flexible stainless steel connector (Design certified by the America Gas Association or CSA International) to connect the dryer.



1 – gas pipe (3/8" male pipe thread)
2 – 3/8" elbow

To reduce the distance between body sheet and wall install a 3/8" elbow on the gas pipe of the dryer.

Exhaust air connection

⚠ WARNING! ⚠

1. To reduce the risk of fire, this dryer MUST BE EXHAUSTED OUTDOORS.
2. To reduce the risk of fire, do not use ductwork longer than recommended.
3. DO NOT use a plastic or non-metal duct with this dryer.
4. DO NOT use a duct smaller than 4 inches in diameter.
5. DO NOT use exhaust hoods with magnetic latches.
6. DO NOT exhaust the dryer into a chimney, furnace cold air duct, attic, crawl space, or any other ductwork used for venting.
7. DO NOT install a flexible duct in an enclosed wall, ceiling or floor.
8. DO NOT crush or kink the duct.
9. Do clean and inspect the exhaust system on a regular basis; at least once a year.
10. The exhaust duct must terminate in a manner to prevent back drafts or entry of birds or other wildlife.

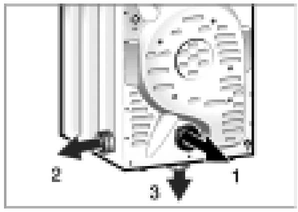
Exhaust air outlet on the dryer

The dryer is delivered with an exhaust air outlet on the rear of the appliance.

To take account of the spatial requirements and an existing exhaust air system, the following connection options are possible for the exhaust air outlet:

- on right side of the appliance,
- on the underside of the appliance.

Installation -- Gas Dryer Installation Instructions (3)



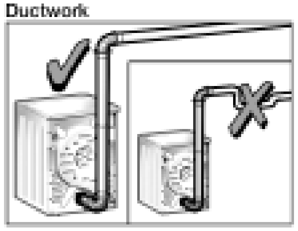
1 – Exhaust air outlet on the rear of the appliance (standard)
2 – Exhaust air outlet on the side (optional)
3 – Exhaust air outlet on the underside of the appliance (optional)

Special exhaust air connections must be obtained from our customer service for either connection type.(see Page 11)

– Side air exhaust
– Bottom air exhaust

Only customer service may change the exhaust air outlet to the optional connection location.

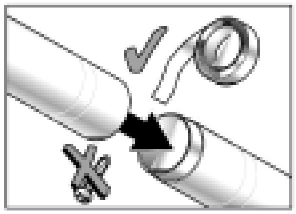
Ductwork



To ensure optimum performance, the ducting system of the dryer should be as short as possible with a minimum number of elbows. Your dryer will work best when the venting system has as few air flow restrictions as possible. Exhaust ducting which is longer than recommended may extend drying time, cause lint to accumulate and affect dryer performance and dryer life.

Four-inch (approx. 100 mm) diameter ducting should be used. Use either rigid metal or flexible metal ducting material. DO NOT use plastic or non-metal duct with this dryer.

DO NOT assemble the ductwork with screws or fasteners that extend into the duct. They will serve as an accumulation point for lint. Joints should be secured with duct tape.



All joints should be tight to avoid leaks. The male end of each duct section must point away from the dryer.

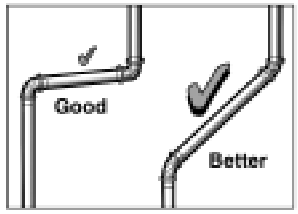
Whether connecting to an existing venting system or a new venting system, make sure that all ducting is clean and free of lint.

The maximum permitted length for both rigid and flexible metal duct is shown in the table below.

Number of 90° Turns or Elbows	Rigid Duct	Flexible Duct
0	66 ft. (2011 cm)	45 ft. (1372 cm)
1	56 ft. (1707 cm)	36 ft. (1097 cm)
2	48 ft. (1463 cm)	29 ft. (884 cm)
3	39 ft. (1189 cm)	22 ft. (671 cm)
4	30 ft. (914 cm)	16 ft. (488 cm)

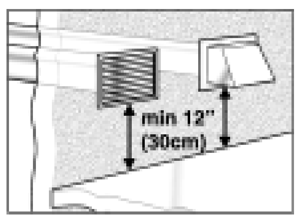
Note:
Side and bottom exhaust installations have a 90° turn inside the dryer. To determine maximum exhaust length, add one 90° turn to the chart.

More than two 90° turns are not recommended. For best performance, separate all turns by at least 4 ft. of straight duct, including distance between last turn and exhaust hood.



Exhaust vent hood
The exhaust duct must end with an approved exhaust vent hood with swing out damper(s). DO NOT use an exhaust vent hood with magnetic latches.

To avoid exhaust restriction, the outlet must be a minimum of 12 inches (30 cm) above ground level or any other obstructing surface.



Required parts
The parts required for the exhaust air system (elbows, lines, exhaust air outlets) are not included in standard delivery of the dryer.

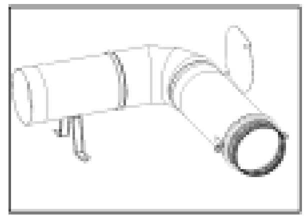
HINT: Don't exceed maximum duct lengths shown in table.

HINT: Use as few elbows as possible.

Accessories

The parts required for the exhaust air system can be obtained from customer service or your local dealer. Please follow the installation instructions supplied by the appropriate manufacturer!

Side exhaust air kit

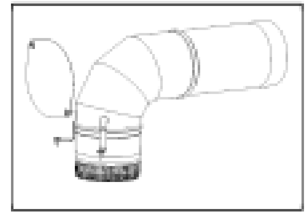


part no. **WTZ1265**

Note:
The maximum permitted number of 90° elbows(including this side exhaust kit) is four!

ℹ Special tool for cutting the hole in prepared side panel is required. Ask customer service!

Bottom exhaust kit



part no.**WTZ1270**

Note:
The maximum permitted number of 90° elbows(including this bottom exhaust kit) is four!

Left hinge kit

part no. **WTZ1260**

The door catch can be reversed if necessary. The door is hinged on the right at the factory.

High Altitude NG – Set

No kit needed

Note:
This gas dryer has been UL and C–UL listed for safe operation up to a height of 7,700 ft. without any modifications to components for natural gas.

Mobile home kit

part no. **WTZ1275**

Note:
Please check with the Authority Having Jurisdiction in your area to verify it a gas dryer can be installed in your mobile home. Once that has been verified, installation of the dryer shall be conform to the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 328D (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD (Part 280)), and/or Standard CAN/CSA–Z240 MH.

Please use mobile home kit number **WTZ1275** for means to secure the dryer to the structure.

See Page 9 "Exhaust Air Connection" for the exhaust duct installation instructions.

The exhaust duct must be securely fastened to a noncombustible portion of the mobile home structure and must not terminate beneath the mobile home.

An opening to the outside must be provided during installation. Insure that the free area of the opening for the introduction of outside air is not less than twice the area of the dryer exhaust outlet or use at least a 5 inch diameter exhaust or at least a 25 in^2 square exhaust duct for the opening.

NOTE: Use 4" metal duct (flexible or rigid) with these dryers. Do not use non-metal duct.

HINT: Using side exhaust kit requires precision cutting of side panel so duct will line up properly and will clear motor. Only right side venting (viewing front of dryer) is possible.

Installation -- Gas Dryer Installation Instructions (4)

Installation – step by step

1. Unpack the dryer.
2. Remove all objects from the drum.
3. Check the dryer for visible damage.
4. Position the dryer near the installation location.
5. If required, have customer service change the door hinges to the right (see page 7).
6. If required, have customer service install the exhaust air outlet on the dryer (see page 9).
7. Have the gas supply connected by an qualified technician (see page 8).
8. Install exhaust duct, if necessary.
   Follow the installation instructions supplied by the appropriate manufacturer!

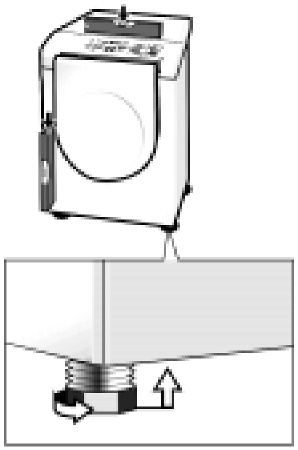
i If space is very restricted, it is recommended to fit the initial parts of the exhaust duct to the dryer before the dryer is moved to its final installation location.

9. Move the dryer to its final location and align.

⚠ CAUTION ⚠

Do not slide dryer across the floor if height-adjustable feet have been extended. Feet and/or dryer base may be damaged if dryer is slid across floor with height-adjustable feet extended.

10. Position and then level the dryer.



The dryer should be level with all four feet firmly on the ground. The dryer must not wobble. If the dryer is not level or if it does wobble, the feet must be adjusted. Adjust the height-adjustable feet until the dryer does not rock and is level, both front-to-back and side-to-side.

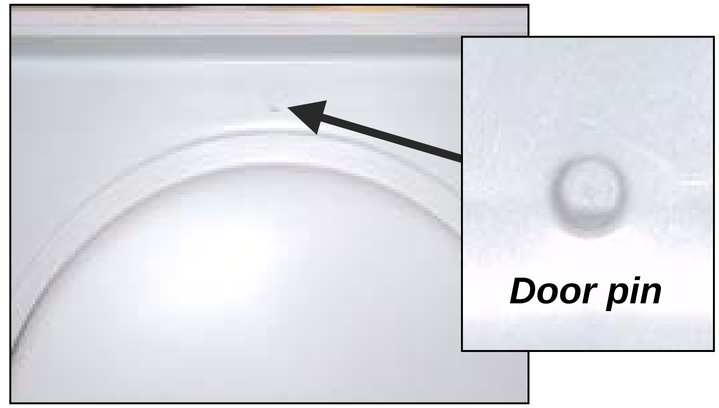
11. Connect the exhaust duct to the exhaust air outlet on the dryer.
12. Insert plug into the wall receptacle.

Check list before using the dryer

1. Check that steps 1–9 have been implemented properly.
2. Ensure that the dryer is connected to the power supply.
3. Open the shutoff valve.
4. Read the operating instructions to understand how your dryer operates.
5. Conduct an appliance test:
   - ❑ Check that the drum is empty.
   - ❑ Close the dryer door.
   - ❑ Switch the dryer to "Extra Dry" and then press the Start button.
   - ❑ After 3–5 minutes press the Stop button and open the door.
6. If the interior of the dryer feels warm, the dryer has been connected properly. Switch the dryer to "OFF".
7. If the dryer does not work, switch the dryer to "OFF". Look in the troubleshooting section (page 26) of the OPERATING INSTRUCTIONS and find the fault.

Preparing to transport the dryer – step by step

1. Close the shutoff valve.
2. Pull out the power supply plug or turn off the circuit breaker.
3. Disconnect the exhaust duct from the exhaust air outlet on the dryer.
4. Place any accessories in the drum.
5. Close the door and secure with adhesive tape.
6. Screw the height-adjustable feet of the dryer into the housing to prevent them from being damaged during transportation.



NOTE: Door pins have additional packaging to protect them during shipping.

- Check door pin condition before initial installation.
- Remove packaging after installing dryer.

HINT: Be careful to not throw away any accessories or manuals during unpacking or installation (including wrenches or installation instructions).

CAUTION: Dryers must be grounded to reduce the risk of shock.

CAUTION: When moving a dryer, screw in the feet (leveling legs) first so they won't be damaged.

Installation – Electric Dryer Installation Instructions (1)

INSTALLATION INSTRUCTIONS

Introduction

Read these installation instructions completely and carefully. They will save you time and effort and help to ensure optimum dryer performance. Be sure to observe all listed warnings and cautions.

These installation instructions are intended for use by qualified installers. In addition to these instructions the dryer must be installed in accordance with all local codes or, in the absence of a local code:

- In the **U.S.A.**, in accordance with the National Electric Code, ANSI/NFPA70 – latest edition/State and Municipal codes and/or local codes.
- In **Canada**, in accordance with the Canadian Electric Code C22.1 – latest edition/Provincial and Municipal codes and/or local codes.

NOTE: Be sure to follow all national & local codes.

Information concerning waste disposal

Disposal of the packaging

⚠ DANGER ⚠

Keep children away from shipping carton and packaging components. Danger of suffocation from plastic foil and folding cartons.

All packaging materials are environmentally friendly and can be reused. Please dispose of packaging in an environmentally friendly manner.

Please ask your dealer or inquire at your local authority about current means of disposal.

Disposal of the appliance

⚠ DANGER ⚠

If appliance is no longer usable, pull out mains plug, cut off power cord and discard with mains plug.

To prevent children from locking themselves in the appliance, remove the door.

Old appliances are not worthless rubbish! Valuable raw materials can be reclaimed from environmentally conscious recycling.

Please ask your dealer or inquire at your local authority about current means of disposal.

CAUTION: When moving a dryer, screw in the feet (leveling legs) first so they won't be damaged.

Before installing the dryer

Unpacking the appliance

⚠ WARNING ⚠

The dryer is very heavy. Do not lift it by yourself. Do not lift the appliance by projecting components (e.g. door) – due to risk of breakage.

⚠ CAUTION ⚠

Remove the appliance packaging carefully to prevent damage to the surfaces.

Check the dryer for transportation damage. Do not connect a dryer which is visibly damaged. If in doubt, contact your dealer.

Supplied components

For U.S.A.

⚠ CAUTION ⚠

The dryer is supplied without a power cord. The power cord must be connected by qualified persons only.

⚠ CAUTION ⚠

After removing the packaging, immediately remove any objects from the drum.

The dryer is delivered as a complete unit. The operating instructions and supplied accessories can be found in the drum.

Installation location

⚠ WARNING ⚠

Do not install the dryer:

- outside closed rooms,
- in an environment with dripping water,
- near flammable materials,
- in rooms which are at risk of frost,
- in rooms which may contain gas or other fuels,
- in cupboards with lockable doors or in alcoves.

The installation room must be well ventilated, otherwise the dryer will operate below optimum performance.

Do not operate the dryer at temperatures above 104°F (40°C) and below 41°F (5°C). Low temperatures affect the automatic program sequence and may prolong the drying times.

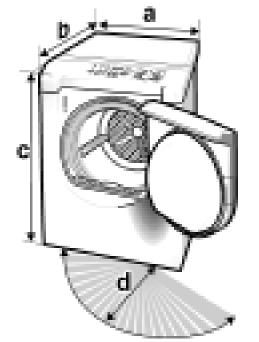
The installation surface for the dryer must be clean, level and firm. Do not install the appliance on carpets! Compensate for uneven floors with the height-adjustable feet.

Install the dryer and level side to side and front to back. Use a spirit level. Never remove the height-adjustable feet!

The size of the installation area depends on the dimensions of the dryer. Ensure that there is adequate room for the swivel range of the door!

NOTE: Dryers must be installed on level, solidly constructed floors.

NOTE: Don't install dryers in closets with solid wooden doors as dryers must have make-up air.



	Dimension	Weight
a	27.0" (686 mm)	125 lbs (56 kg)
b	31.8" (808 mm)	
c	37.2" (945 mm)	with packaging
d angle	19.7" (500 mm)/ 170–180°	143 lbs (64 kg)

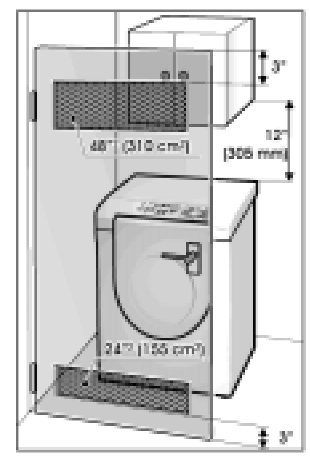
If installing the dryer in a closet, observe the minimum distances according to the following table:

Minimum Installation Clearances

	Closet
Sides	0" (0 mm)
Top	12" (305 mm)
Rear	0" (0 mm)

Important information concerning minimum distances:

- Depending on the location of the exhaust air connection, an additional minimum distance of 5½ inch (14 cm) must be provided on this side for pipes/brackets (see page 9).
- Distances above the indicated minimum dimensions reduce the risk of mold formation behind the appliance.
- Additional distances reduce noise transmission.
- Additional distances facilitate installation and service.
- If the dryer is installed in a small room, the doors of the room must be fitted with vents of a specified minimum size.



The dryer door is delivered with hinges on the right. If required, the door hinges can be switched to the left side.

If the door hinges are to be changed over, please contact your dealer or our customer service–team (see page 27)

Installation – Electric Dryer Installation Instructions (2)

Electrical connection

⚠ WARNING ⚠

Power cord must be connected by a qualified person only.

Connect to individual Brunch Circuit.

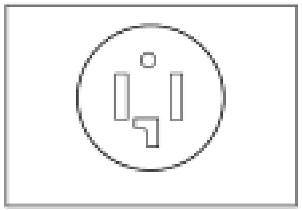
Do not use an adapter.
Do not use an extension cord.

Do not remove ground prong.

For CANADA

Your dryer comes with a power supply cord, CSA listed in Canada.

The Bosch dryer requires a 4-wire receptacle.



When installing the receptacle for the dryer cord, ensure that the power supply cord is accessible when the dryer is in the installed position.

The power cord should only be replaced by a qualified person. Use a 4-wire power supply cord (see electrical connection U.S.A. below).

For U.S.A.
Your dryer comes without a power supply cord. The power cord must meet the following requirements:

- UL listed in the USA
- 208 – 240 volt rated (minimum)
- 30 amps
- Type SRDT or DRT (UL 2158)
- Five feet long (minimum)

⚠ WARNING ⚠

Power cord must only be connected by a licensed electrician.

Use only a U.L. approved 30 amp power cord with strain relief clamp – note manufacturer's instructions.

Do not plug end of power cord into a live receptacle before connecting power cord to appliance terminals and closing junction/splitter box as described below.

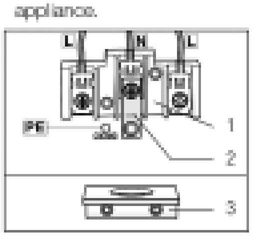
Do not reuse old power cord. Cord must have closed loop or upturned end wire terminating connectors.

Do not make a sharp bend or crimp wiring/conductor at connections.

Only a 4–conductor cord shall be used when the appliance is installed in a mobile home or an area where the local codes do not permit grounding through the neutral.

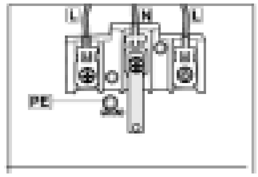
Connecting 4-wire power supply cord

1. Remove the screws from the cover of the terminal block located at the top rear of the appliance.

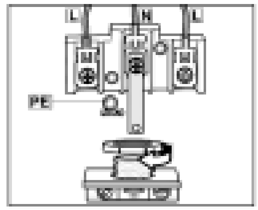


1 – terminal block
2 – grounding strap
3 – Angle bracket for strain relief clamp

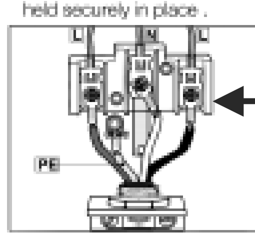
2. Loosen the bottom screw of the grounding strap. Place the screw to the GROUND location. Planish the grounding strap and hang loosely.



3. Fix the strain relief clamp to the angle bracket. Tighten the nut.



4. Loosen the 2 screws labeled **L** and the screw labeled **N** in the terminal block. and the screw of the GROUND terminal.
5. Thread the 4 wire cable through the U.L. strain relief clamp.
6. Tighten the screws (2.5 Nm) of the U.L. strain relief clamp so that the power cord cannot be moved.
7. Attach the power cord ground conductor (green) to the GROUND terminal. Tighten the screw (2.5 Nm) so that the ground conductor is held securely in place.
8. Attach the 2 power cord outer conductors (red and black) to the 2 terminals labeled L and the remaining power cord conductor (white) to the terminal labeled N.
9. Tighten all 3 screws (3 Nm) so that the power conductors are held securely in place .



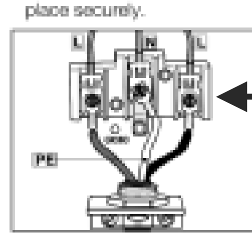
10. Check the U.L. strain relief clamp to make sure that it is tight and cannot be turned.
11. Replace the cover on the terminal block and fasten in place.

ℹ Make sure that the U.L. strain relief clamp is outside the cover!

The appliance is now ready to be plugged into the 4-wire receptacle of the power rating.

Connecting 3-wire power supply cord

1. Remove the screws from the cover of the terminal block located at the top rear of the appliance.
2. Make sure that there is a grounding strap.
3. Fix the the strain relief clamp to the angle bracket. Tighten the nut.
4. Loosen the 2 screws labeled **L** and the screw labeled **N** in the terminal block.
5. Thread the 3-wire cable through the U.L. strain relief clamp.
6. Attach the 2 power cord outer conductors (red and black) to the 2 terminals labeled L and the remaining power cord conductor (white) to the terminal labeled N. Tighten all 3 screws (3 Nm) so that the power conductors are held in place securely.



7. Tighten the screws (2.5 Nm) on the U.L. strain relief clamp so that the power cord cannot be moved.
8. Check the U.L. strain relief clamp to make sure that it is tight and cannot be turned.
9. Replace the cover on the terminal block and fasten in place.

ℹ Make sure that the U.L. strain relief clamp is outside the cover!

Additional grounding procedure

- Some local regulations may require a separate ground. In such cases, the required accessory ground wire, clamp and screw must be purchased separately.
- Never ground the dryer to plastic plumbing lines, gas lines or water pipes.

Grounding instruction

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for the electric current. This appliance features a cord which has an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which has been properly installed and grounded in accordance with all local regulations and ordinances.

⚠ WARNING ⚠

Improper connection of the equipment grounding conductor may result in electric shock. Have the appliance checked by a qualified electrician or service technician if you are in doubt as to whether the dryer has been properly grounded.

HINT: Use torque, not drill, setting on power screwdrivers. Don't tighten terminal screws more than 3.0 N-m (2.2 ft-lb).

Exhaust air connection

⚠ WARNING ⚠

1. To reduce the risk of fire, this dryer MUST BE EXHAUSTED OUTDOORS.
2. To reduce the risk of fire, do not use ductwork longer than recommended.
3. DO NOT use a plastic or non-metal duct with this dryer.
4. DO NOT use a duct smaller than 4 inches in diameter.
5. DO NOT use exhaust hoods with magnetic latches.
6. DO NOT exhaust the dryer into a chimney, furnace cold air duct, attic, crawl space, or any other ductwork used for venting.
7. DO NOT install a flexible duct in an enclosed wall, ceiling or floor.
8. DO NOT crush or kink the duct.
9. Do clean and inspect the exhaust system on a regular basis; at least once a year.
10. The exhaust duct must terminate in a manner to prevent back drafts or entry of birds or other wildlife.

The Bosch dryers must be vented outdoors. To prevent build-up of moisture and accumulation of lint indoors, as well as to maintain maximum drying efficiency, it is recommended that the dryer is vented outdoors.

Exhaust air outlet on the dryer
The dryer is delivered with an exhaust air outlet on the rear of the appliance.

To take account of the spatial requirements and an existing exhaust air system, the following connection options are possible for the exhaust air outlet:

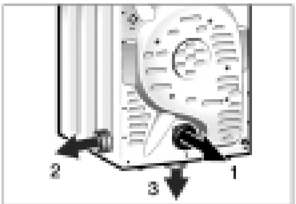
- on right side of the appliance,
- on the underside of the appliance.

IMPORTANT: 240V electric dryers **must** be connected to a neutral or else they won't work.

CAUTION: Dryers must be grounded to reduce the risk of shock.

BOSCH / SIEMENS

Installation – Electric Dryer Installation Instructions (3)



1 – Exhaust air outlet on the rear of the appliance (standard)

2 – Exhaust air outlet on the side (optional)

3 – Exhaust air outlet on the underside of the appliance (optional)

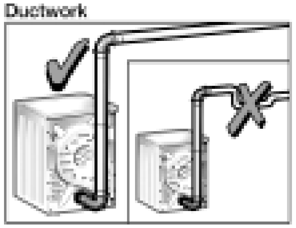
Special exhaust air connections must be obtained from your dealer or parts supplier for either connection type.(see Page 11)

– Side exhaust kit

– Bottom exhaust kit

A qualified technician should change the exhaust air outlet to the optional connection location.

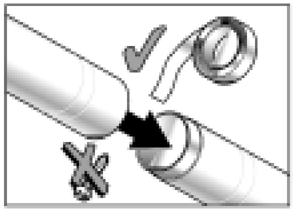
Ductwork



To ensure optimum performance, the ducting system of the dryer should be as short as possible with a minimum number of elbows. Your dryer will work best when the venting system has as few air flow restrictions as possible. Exhaust ducting which is longer than recommended may extend drying time, cause lint to accumulate and affect dryer performance and dryer life-time.

Four-inch (approx. 100 mm) diameter ducting should be used. Use either rigid metal or flexible metal ducting material. DO NOT use plastic or non-metal duct with this dryer.

DO NOT assemble the ductwork with screws or fasteners that extend into the duct. They will serve as an accumulation point for lint. Joints should be secured with duct tape.



All joints should be tight to avoid leaks. The male end of each duct section must point away from the dryer.

Whether connecting to an existing venting system or a new venting system, make sure that all ducting is clean and free of lint.

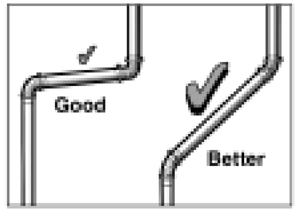
The maximum permitted length for both rigid and flexible metal duct is shown in the table below.

Number of 90° Turns or Elbows	Rigid Duct	Flexible Duct
0	66 ft. (2011 cm)	45 ft. (1372 cm)
1	56 ft. (1707 cm)	36 ft. (1097 cm)
2	48 ft. (1463 cm)	29 ft. (884 cm)
3	39 ft. (1189 cm)	22 ft. (671 cm)
4	30 ft. (914 cm)	16 ft. (488 cm)

Note:
Side and bottom exhaust installations have a 90° turn inside the dryer. To determine maximum exhaust length, add one 90° turn to the chart.

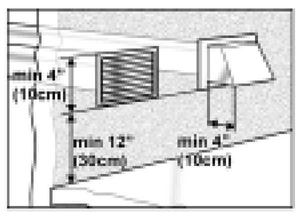
HINT: Don't exceed maximum duct lengths shown in table.

More than two 90° turns are not recommended. For best performance, separate all turns by at least 4 ft. of straight duct, including distance between last turn and exhaust hood.



Exhaust vent hood
The exhaust duct must end with an approved exhaust vent hood with swing out louvers. DO NOT use an exhaust vent hood with magnetic latches.

To avoid exhaust restriction, the outlet must be a minimum of 12 inches (30 cm) above ground level or any other obstructing surface.

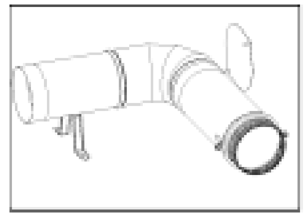


Required parts
The parts required for the exhaust air system (elbows, lines, exhaust air outlets) are not included in standard delivery of the dryer.

Accessories

The parts required for the exhaust air system can be obtained from your local dealer. Please follow the installation instructions supplied by the appropriate manufacturer!

Side exhaust kit



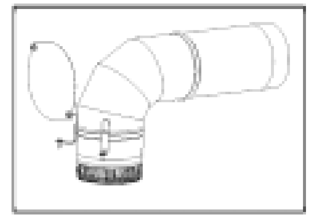
part no. **WTZ1265**

Note:
The maximum permitted number of 90° elbows (including this side exhaust kit) is four!

Special tool for cutting the hole in prepared side panel is required. Ask customer service!

HINT: Use as few elbows as possible.

Bottom exhaust kit



part no. **WTZ1270**

Note:
The maximum permitted number of 90° elbows (including this bottom exhaust kit) is four!

Left hinge kit

part no. **WTZ1260**

The door catch can be reversed if necessary. The door is hinged on the right at the factory.

HINT: Using side exhaust kit requires precision cutting of side panel so duct will line up properly and will clear motor. Only right side venting (viewing front of dryer) is possible.

HINT: Dryers can be run on 240V **or** 208V. To change voltage from 240V to 208V, use voltage changeover test (8th position from right).

NOTE: Use 4" metal duct (flexible or rigid) with these dryers. Do not use non-metal duct.

CAUTION: When moving a dryer, screw in the feet (leveling legs) first so they won't be damaged.

Installation – Electric Dryer Installation Instructions (4)

Installation – step by step

1. Unpack the dryer.
2. Remove all objects from the drum
3. Check the dryer for visible damage.
4. Position the dryer near the installation location.
5. If required, change the door hinge to the right (see page 7).
6. If required install the exhaust air outlet on the dryer (see page 9).
7. Have the power supply cord fitted by an authorized technician (see page 8).
8. Install exhaust duct, if necessary. Follow the installation instructions supplied by the appropriate manufacturer!

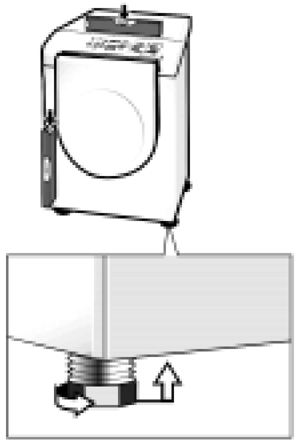
i If space is very restricted, it is recommended to fit the initial parts of the exhaust duct to the dryer before the dryer is moved to its final installation location.

9. Move the dryer to its final location and align.

⚠ CAUTION ⚠

Do not slide dryer across the floor if height-adjustable feet have been extended. Feet and/or dryer base may be damaged if dryer is slid across floor with height-adjustable feet extended.

10. Position and then level the dryer.



The dryer should be level with all four feet firmly on the ground. The dryer must not wobble. If the dryer is not level or if it does wobble, the feet must be adjusted. Adjust the height-adjustable feet until the dryer does not rock and is level, both front-to-back and side-to-side.

11. Connect the exhaust duct to the exhaust air outlet on the dryer.
12. Insert plug into the wall receptacle.

HINT: Be careful to not throw away any accessories or manuals during unpacking or installation (including wrenches or installation instructions).

HINT: Dryers can be run on 240V **or** 208V. To change voltage from 240V to 208V, use voltage changeover test (8th position from right).

Check list before using the dryer

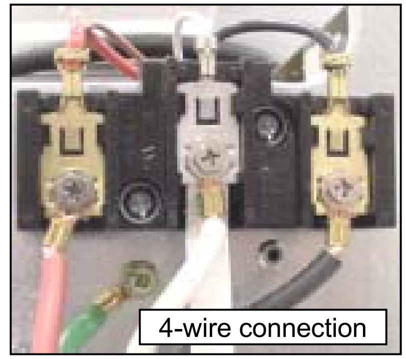
1. Check that steps 1–9 have been implemented properly.
2. Ensure that the dryer is connected to the power supply.
3. Read the operating instructions to understand how your dryer operates.
4. Conduct an appliance test:
   - ❑ Check that the drum is empty.
   - ❑ Close the dryer door.
   - ❑ Switch the dryer to "Extra Dry" and then press the Start button.
   - ❑ After 3–5 minutes press the Stop button and open the door.
5. If the interior of the dryer feels warm, the dryer has been connected properly. Switch the dryer to "OFF".
6. If the dryer does not work, switch the dryer to "OFF". Look in the troubleshooting section (page 28) of the OPERATING INSTRUCTIONS and find the fault.

Preparing to transport the dryer – step by step

1. Rotate the program selector to "Off".
2. Pull out power supply plug.
3. Disconnect the exhaust duct from the exhaust air outlet on the dryer.
4. Place any accessories in the drum.
5. Close the door and secure with adhesive tape.
6. Screw the height-adjustable feet of the dryer into the housing to prevent them from being damaged during transportation.
7. Tape up the door.

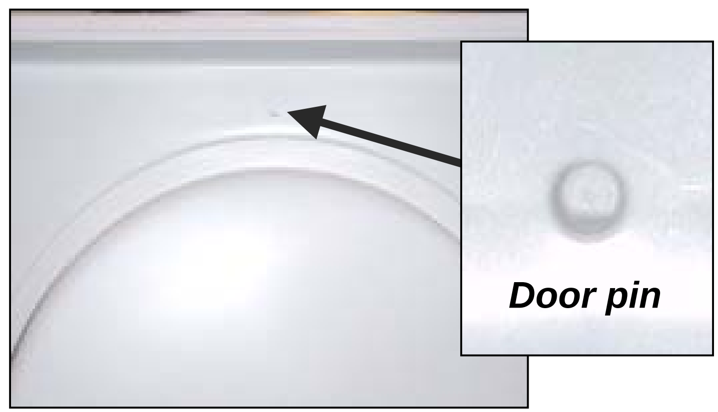


HINT: Canadian dryers use a **NEMA 10-30P** 240V, 30A, 4-wire plug, which mates to a NEMA 10-30R outlet (receptacle).



IMPORTANT: 240V electric dryers **must** be connected to a neutral or else they won't work.

CAUTION: Dryers must be grounded to reduce the risk of shock.

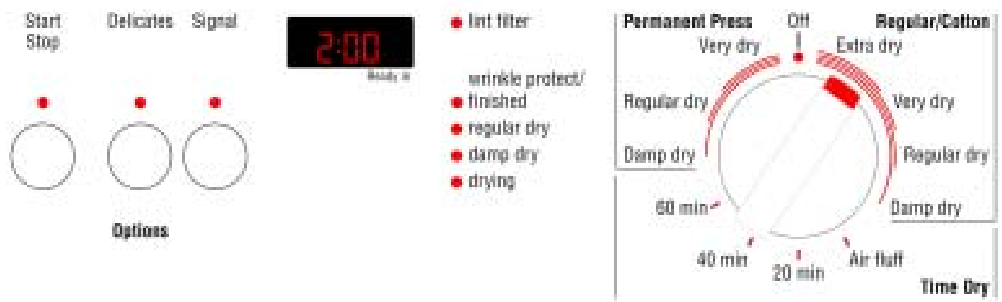


NOTE: Door pins have additional packaging to protect them during shipping.

- Check door pin condition before initial installation.
- Remove packaging after installing dryer.

Operation -- Fascia Panels

WTMC3300US/CN (Electric)



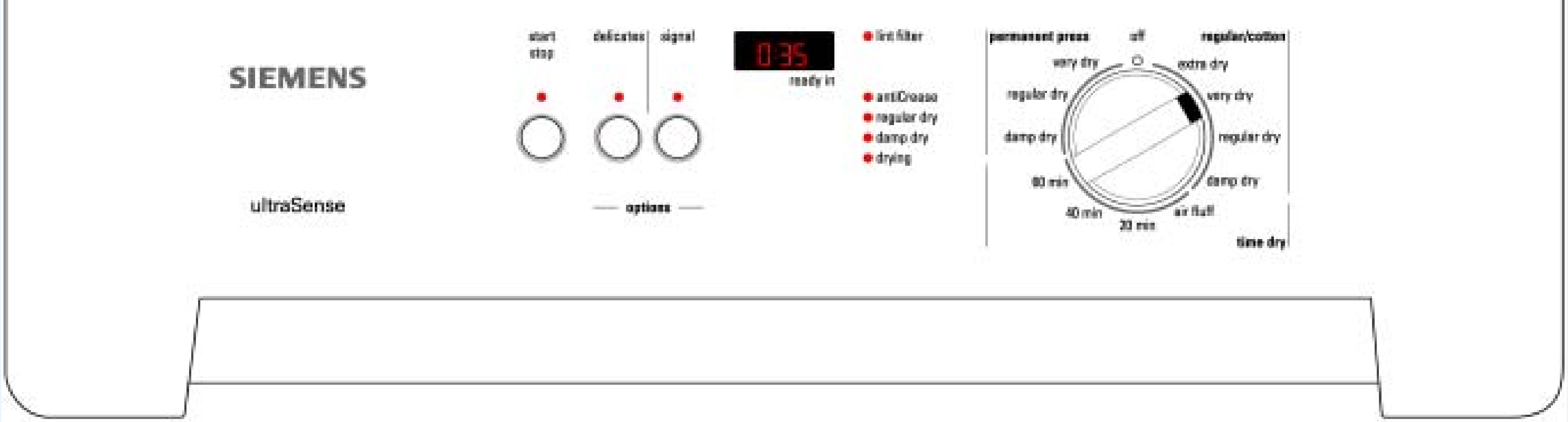
WTMC6300US/CN (Electric) & WTMC6500UC (Gas)



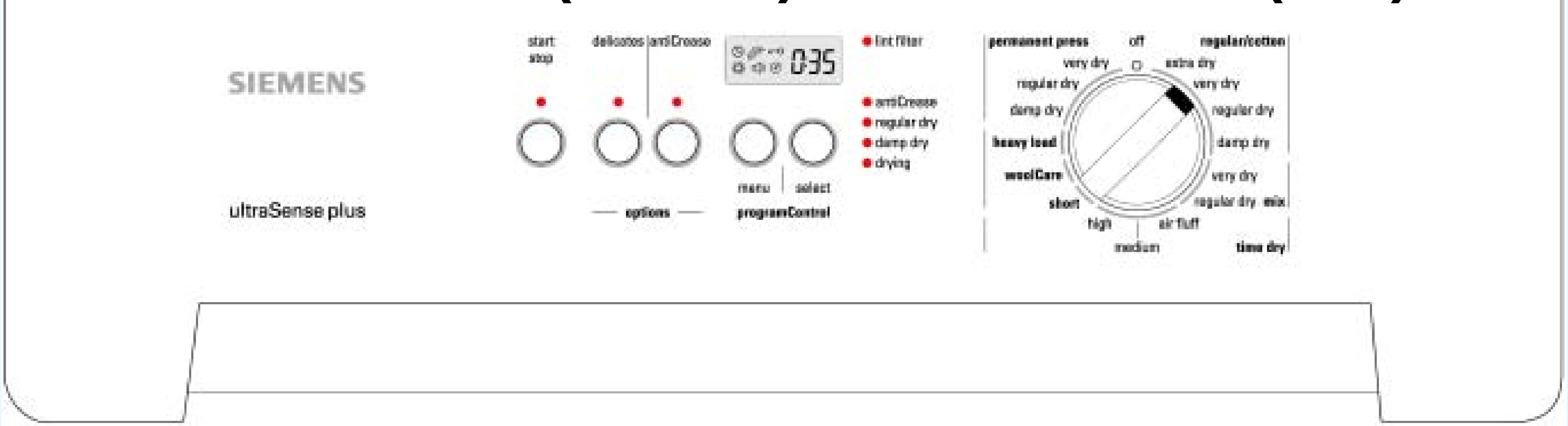
SIEMENS

Operation -- Fascia Panels

WTXD5300US (Electric)

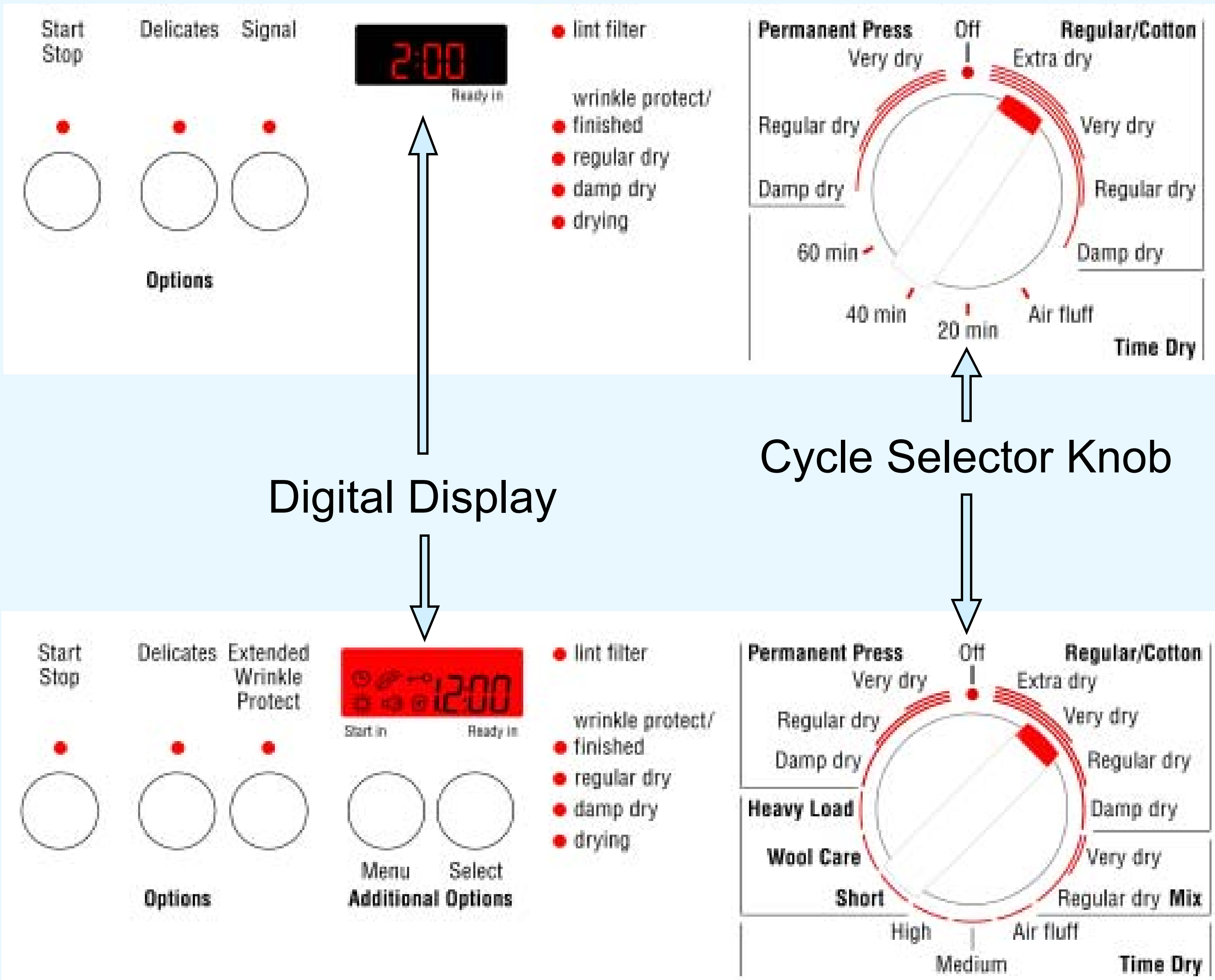


WTXD8300US (Electric) & WTXD8500UC (Gas)



BOSCH

Operation -- Controls

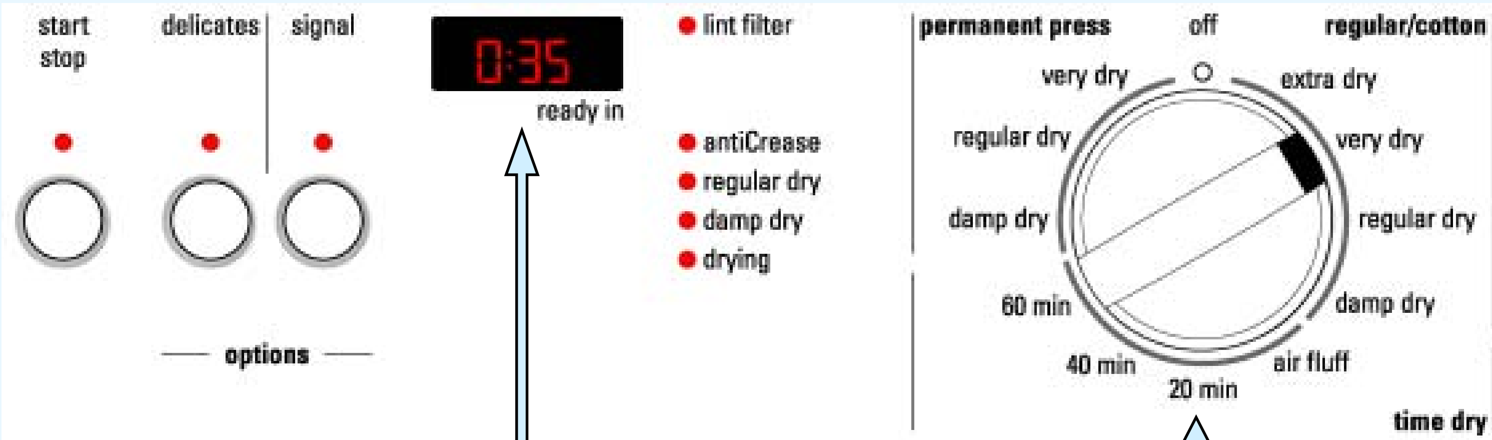


WTMC3300US/CN (Electric)

Both have *Regular/ Cotton*, *Permanent Press*, *Timed Dry*, *Air Fluff* & *Delicates* settings.

WTMC6300US/CN (Electric) / WTMC6500UC (Gas)

Operation -- Controls

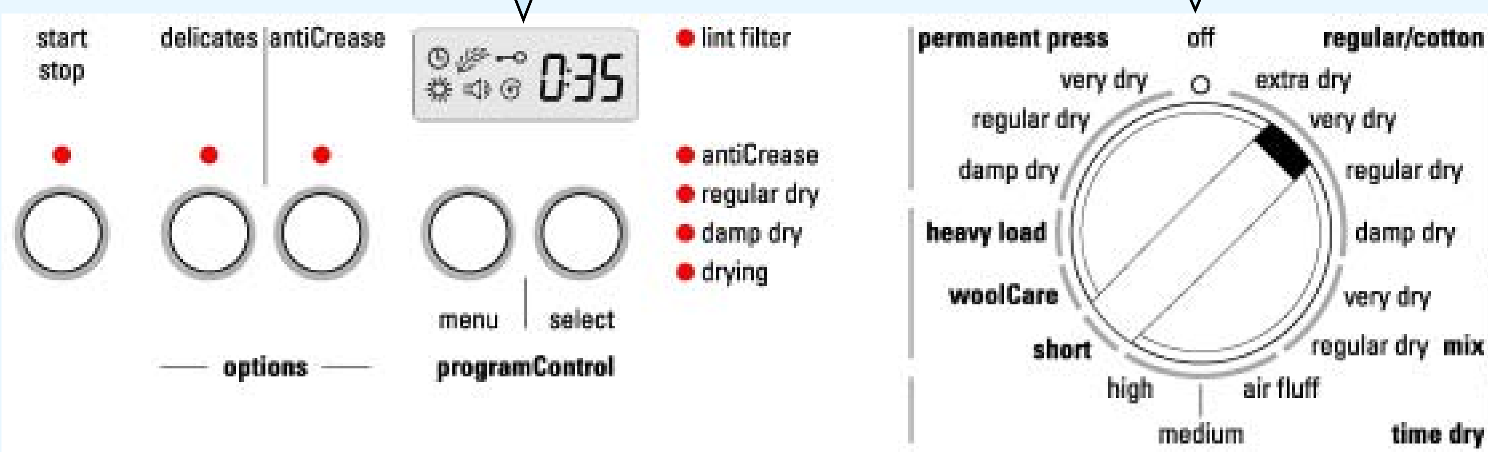


WTXD5300US (Electric)

Digital Display

Cycle Selector Knob

Both have *Regular/ Cotton*, *Permanent Press*, *Timed Dry*, *Air Fluff* & *Delicates* settings.



WTXD8300US (Electric) / WTXD8500UC (Gas)

BOSCH / SIEMENS

Operation -- Cleaning Lint Filter

Lint Filter

The lint filter should be cleaned after each use or if the ***Lint Filter*** light becomes illuminated and the buzzer sounds during operation of the dryer:

1. Immediately stop dryer by rotating ***cycle selector knob*** to ***Off*** position.
2. Open door.
3. Remove filter.
4. Clean filter.
5. Replace filter.
6. Let dryer cool down.
7. Close door.
8. Rotate ***cycle selector knob*** to desired cycle and press ***Start/Stop*** button to restart dryer.



HINT: If the *"lint filter"* light won't turn off, clean the lint filter (by hand) with dish soap and water. The lint filter is very fine and can be clogged over time when fabric softener or softener sheets are used.

NOTE: The *"lint filter"* light will turn on during normal use when the lint filter needs to be cleaned. The light will NOT turn on during the test program.

Disassembly -- Fascia Panel





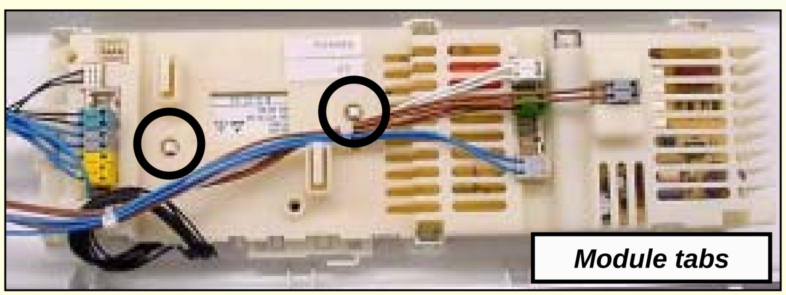
<u>To remove fascia panel</u> to access control module:

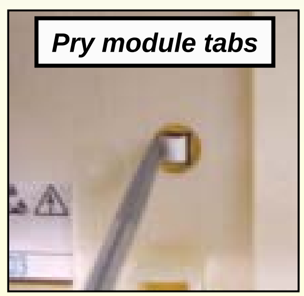
- Disconnect electric power. Remove (4) T-20 Torx front/side screws and lift panel up. Caps over screws can be removed using fingernails or a sharp knife – take care to not scratch fascia panel or caps.

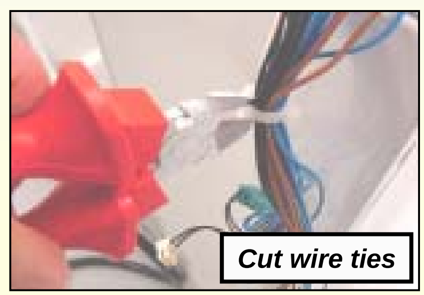
<u>To remove control module from fascia panel</u>:

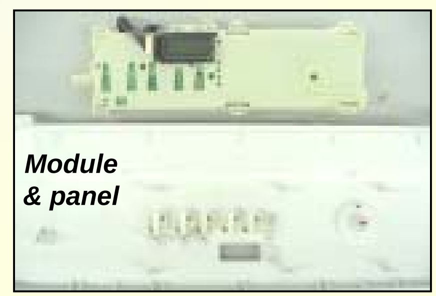
- For best results, start from the left and work progressively toward the right. Module will be upside-down (due to wire harnesses).
- Using a small blade (calibrating) screwdriver, <u>gently</u> pry two (2) internal tabs, starting from left to right. Don't pry all two (2) internal tabs at once -- pry outside tabs (top & bottom) & internal tabs <u>together</u> from left to right.
- Don't force the module as you pry left to right. The module will come off easily if removed properly, although it can be tricky. Plastic parts can break.
- The knob <u>cannot</u> be removed from the fascia panel – it does <u>NOT</u> need to be removed to remove the control module. The module lifts away from the knob.
- Don't break wire mounts holding wire harnesses to fascia panel – cut wire ties holding harnesses to mounts. Bring replacement wire ties for reassembly.

Rear access is best for most repairs.









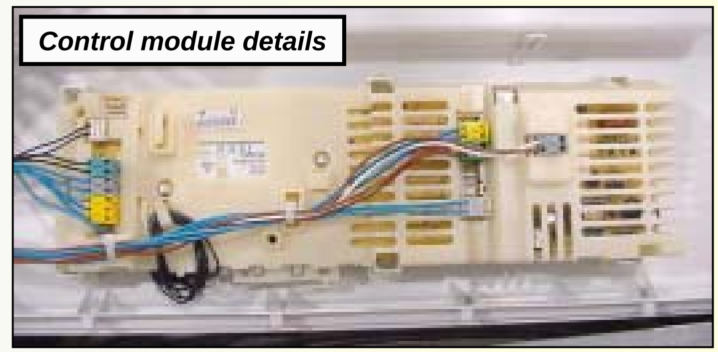
Disassembly -- Top Panel

To remove top panel for improved access:

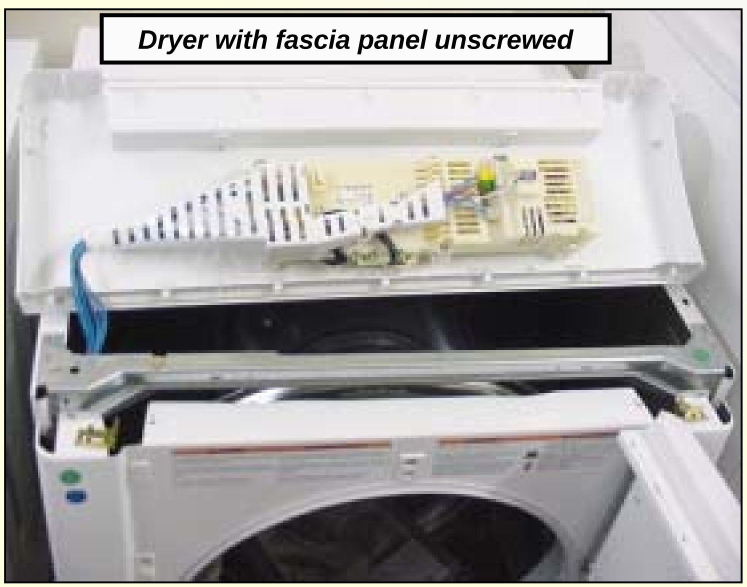
- Remove fascia panel first. If fascia panel or control module doesn't need to be removed, support panel to avoid damage to module or wire harnesses.
- Remove T-20 Torx screws, then lift panel up.
- NOTE: Although the top panel doesn't have to be removed, its easy to remove and its removal provides better access for all repairs.



T-20 screws



Control module details

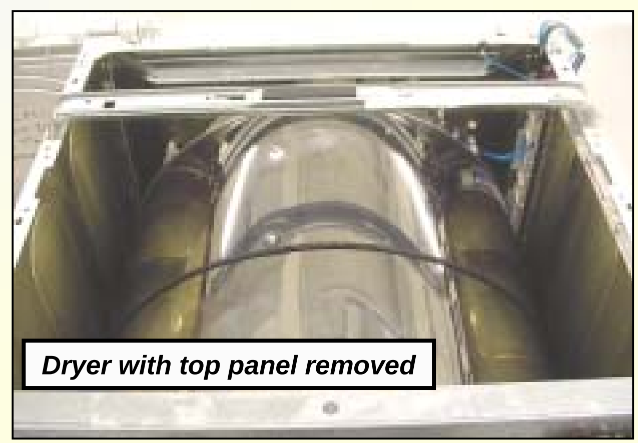


Dryer with fascia panel unscrewed

Rear access is best for most repairs.

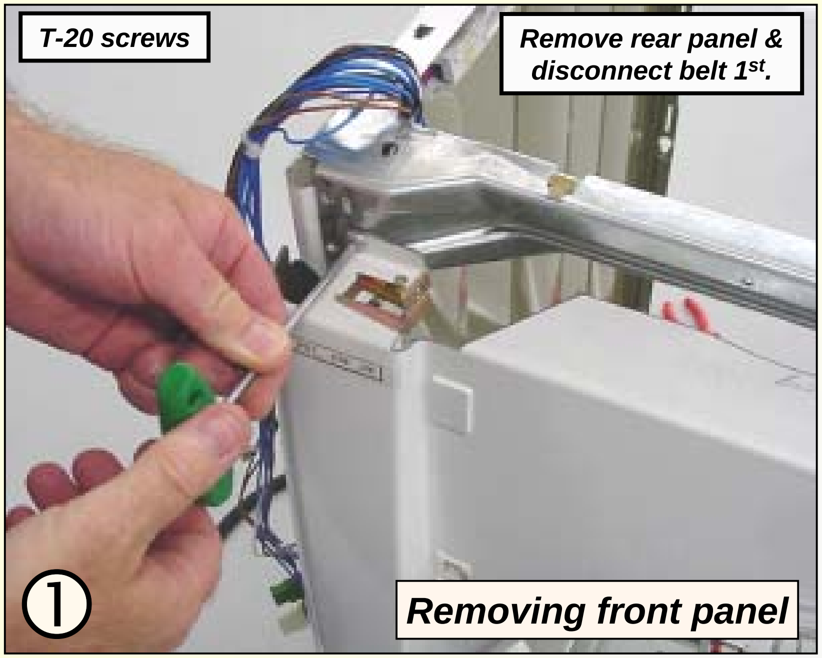


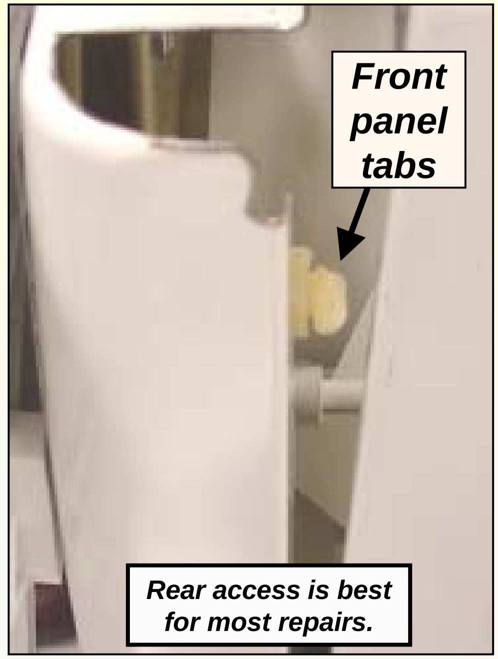
Fascia panel side screw bushing



Dryer with top panel removed

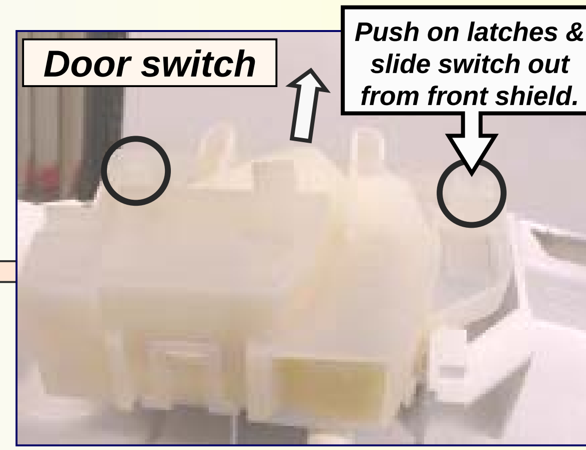
Disassembly -- Front Panel (1)



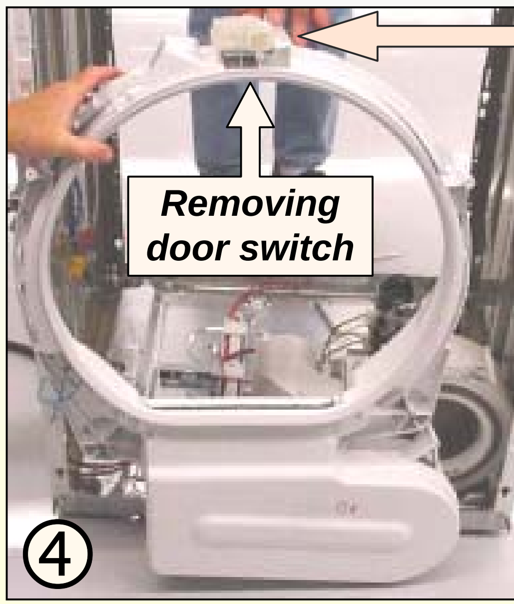


HINT:

- Remove front panel to access front (bearing) shield, fan, R3 NTC & door switch. Disconnect drum belt (to remove tension) before removing front panel.
- Front panel hangs to frame by six tabs, three/side. Panels can be tricky to reinstall, especially engaging all six tabs to frame.





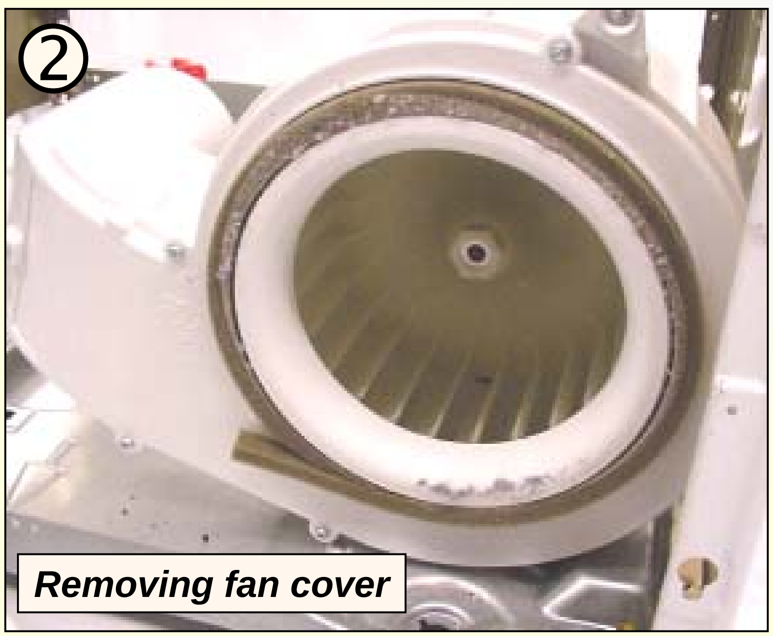




Disassembly -- Front Panel (2)



Removing fan housing



Removing fan cover



NOTE:
Occasionally door hinge white plastic bushings can fall off. Make sure all four are collected when removing hinges.

Rear access is best for most repairs.



Removing door latch



Removing door hinge cover



Removing door hinge

HINT: To remove door, open it 180º (so it doesn’t fall off), remove hinge cover and lift door off hinge.

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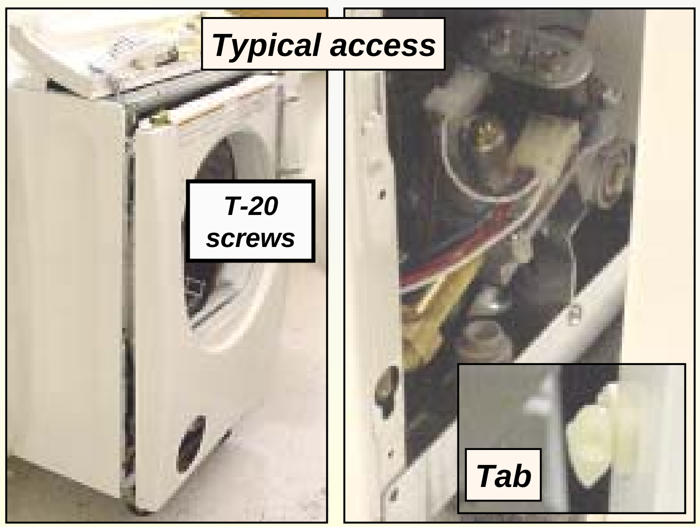
Disassembly -- Front Panel (3): Gas Front Access

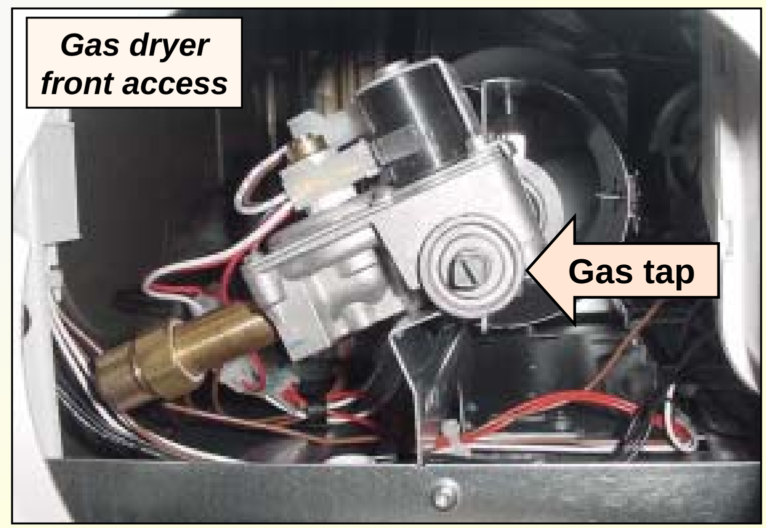
Removing front access cover for access to gas dryers:

Gas dryers have a front access cover for checking gas pressure at the gas valve (and for gas leaks). Removing the rear cover and drum gives better access for most repairs, but removing front access covers and moving front panels can give limited access where needed.

- To remove the access cover, insert a pointed object (or tool) into the hole, push in to release the latch and rotate the cover clockwise.
- To remove front panel, first remove fascia panel by removing (4) T-20 Torx screws and lifting fascia panel up out of the way. Disconnect drum belt (to remove tension), then remove front panel T-20 Torx screws and lift front panel up (so tabs clear dryer frame).
- Don't remove the front shield – it has the two front drum support wheels. If front shields are removed, drums must be supported so they won't fall.







HINT: Gas valves and burners are attached together to a single bracket. To remove them, screws must be removed from the base and burner chamber.

HINT: If gas valves and gas piping will be disconnected, turn off gas supply to dryer first.

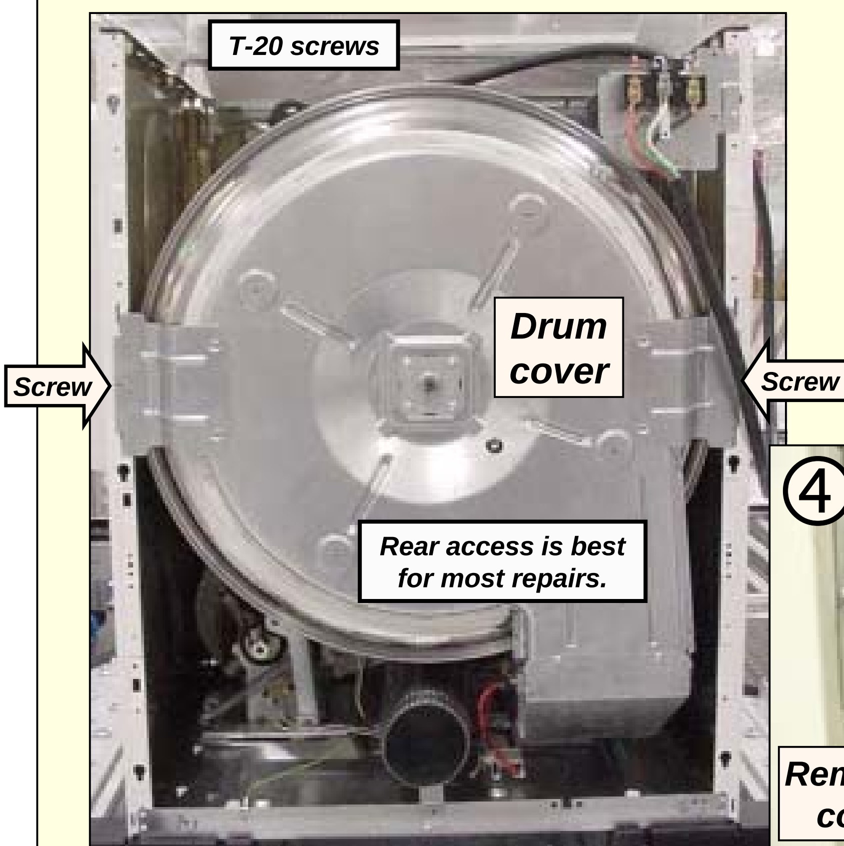
Disassembly -- Rear Panel & Drum Cover

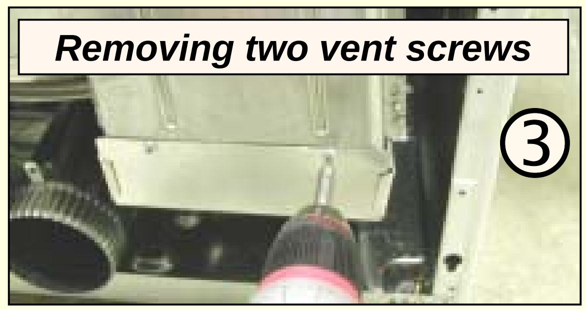
To remove rear panel (to access drum, drum rear bearing, drum/fan drive motor, broken belt switch & heater (electric)/burner (gas) with R2 NTC & Hi-limit)

- Remove (22) rear panel screws, then lift panel up and out.
- To remove drum, remove rear drum cover and bearing by removing two (2) screws and lifting cover up.

HINT: Remove rear panel:

- To access drum, drum rear bearing, drum/fan drive motor, broken belt switch & heater (electric)/burner (gas) with R2 NTC & Hi-limit.
- To disconnect drum belt to facilitate front panel removal.





Removing two vent screws



Lifting drum cover out

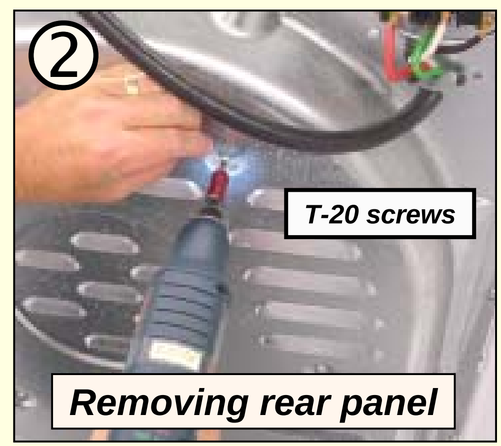
NOTE: The (22) screws includes the one (1) rear air duct screw.



Removing drum cover screw



Removing exhaust vent screw



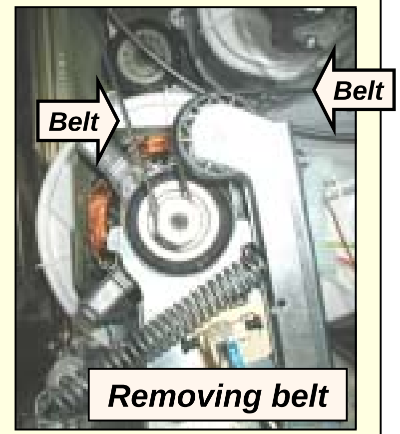
Removing rear panel

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Disassembly -- Drum

Removing drum:

- If not done already, disconnect wire harnesses hindering removing drum and place them out of the way. Leave the control module (with wire harnesses) mounted to the frame.
- Remove terminal block (electric dryers) for better access.
- If not done already, remove rear panel and drum cover (with rear bearing). Disconnect drum cover from duct area.
- Remove belt from drum and belt tensioner.
- Carefully lift drum (toward rear of dryer) out from front shield drum support wheels.









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Disassembly – Parts Accessed when Drum Removed (1)



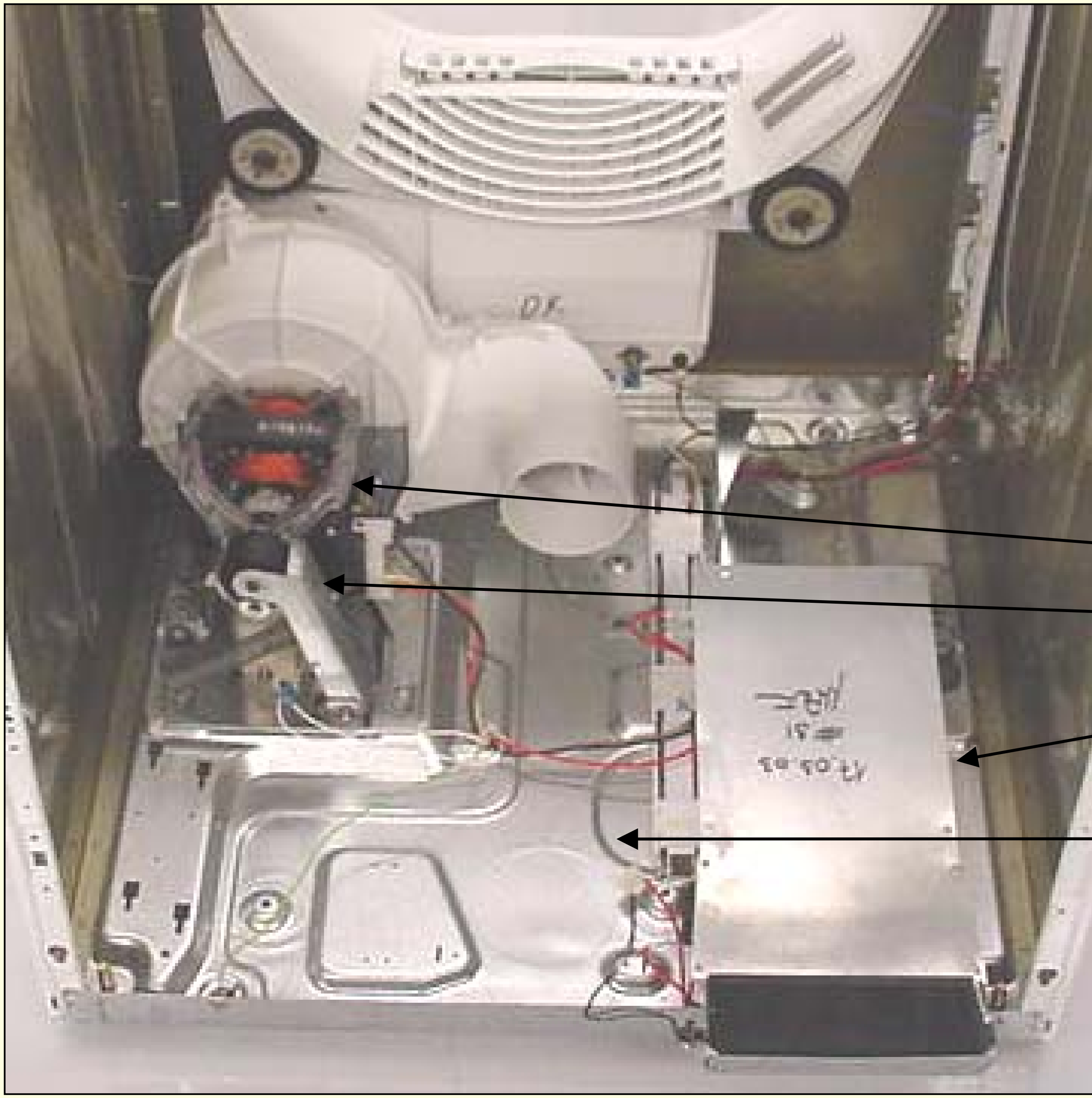
Gas dryer after drum has been removed.

PARTS ACCESSIBLE WHEN DRUM REMOVED:

- Gas valve
- Gas igniter & flame sensor
- Drum drive/fan motor
- Broken belt switch/belt tightener assy.
- Burner chamber with N2 NTC & Hi-limit
- Rear air duct

Rear access is best for most repairs.

Disassembly – Parts Accessed when Drum Removed (2)



Electric dryer after drum has been removed.

<u>PARTS ACCESSIBLE WHEN DRUM REMOVED</u>:

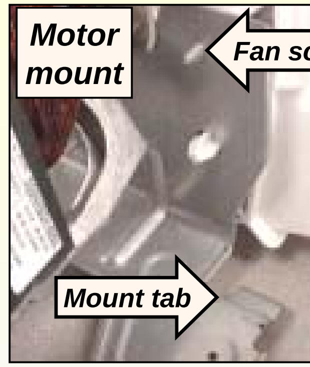
- Drum drive/fan motor
- Broken belt switch/belt tightener assy.
- Heater assy. with N2 NTC & Hi-limit
- Rear air duct (removed from this photo)

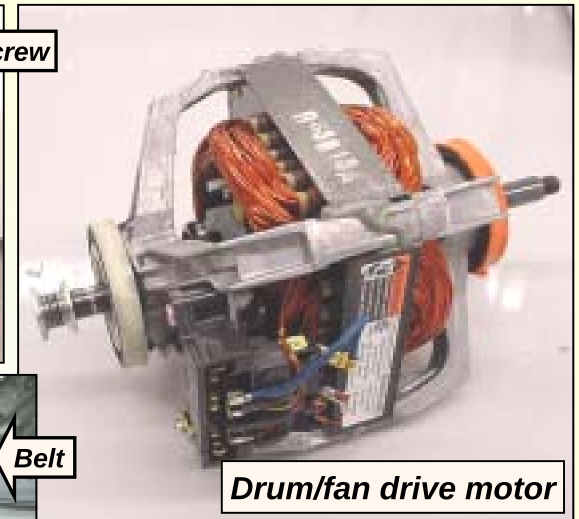
Rear access is best for most repairs.

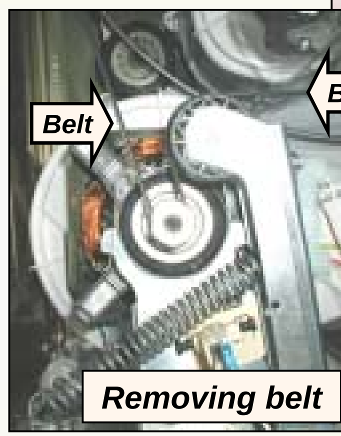
Disassembly – Drum/Fan Drive Motor

To remove drum/fan drive motor:

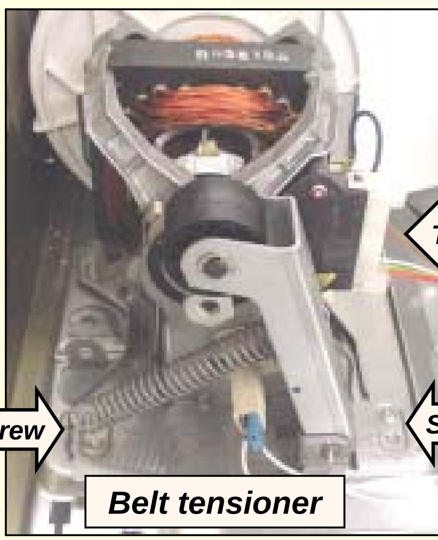
- Remove rear panel & rear air duct. Remove belt from belt tensioner. Remove top panel & drum if needed for better access.
- Disconnect terminal connector from motor, then remove two screws from motor mount & one screw holding fan to front shield. Lift rear of motor mount up and slide entire assembly toward rear of dryer.
- While holding motor shaft, not rotor fins, remove fan blade from motor shaft. Remove three screws, then remove fan housing from motor.
- Remove spring clamps by pushing ends of them down and away from motor. Lift motor up from motor mount.



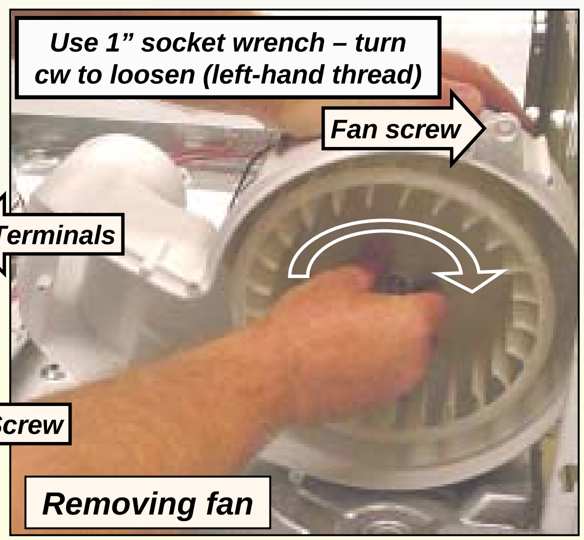

Drum/fan drive motor



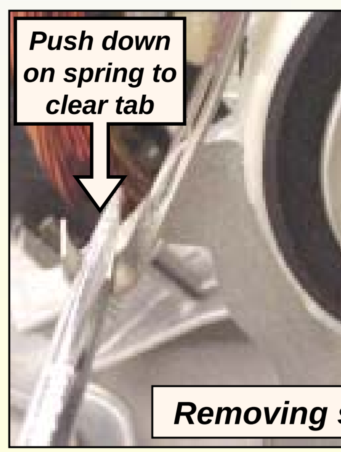
Removing belt

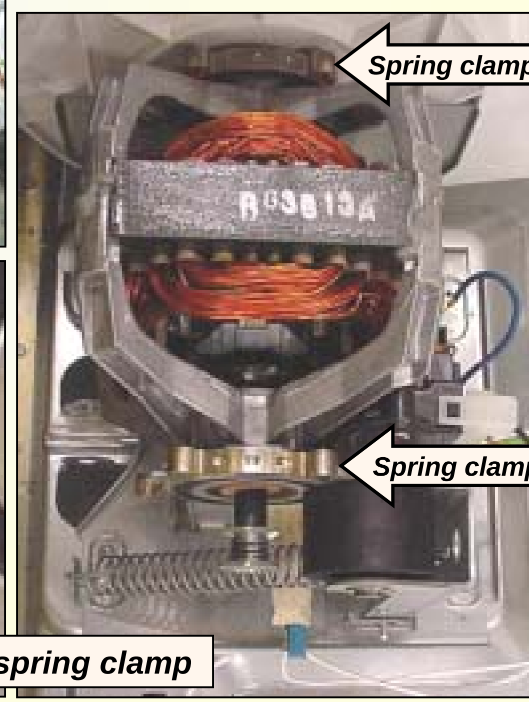


Belt tensioner



Removing fan



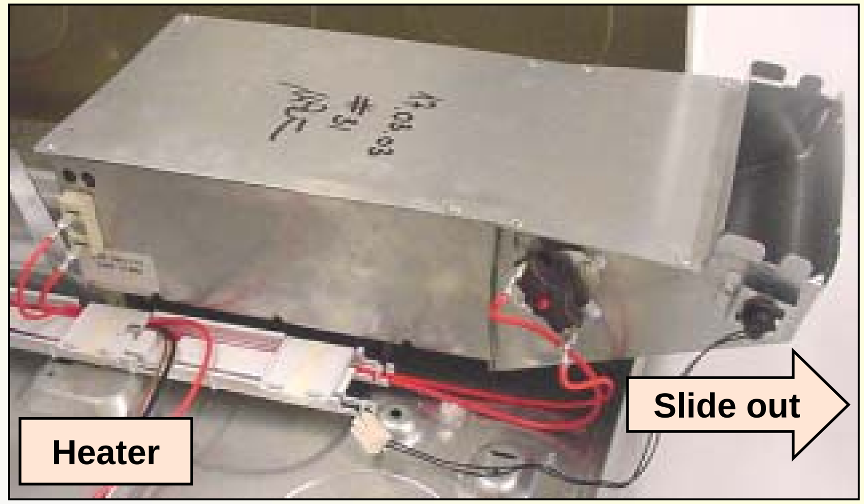


Removing spring clamp

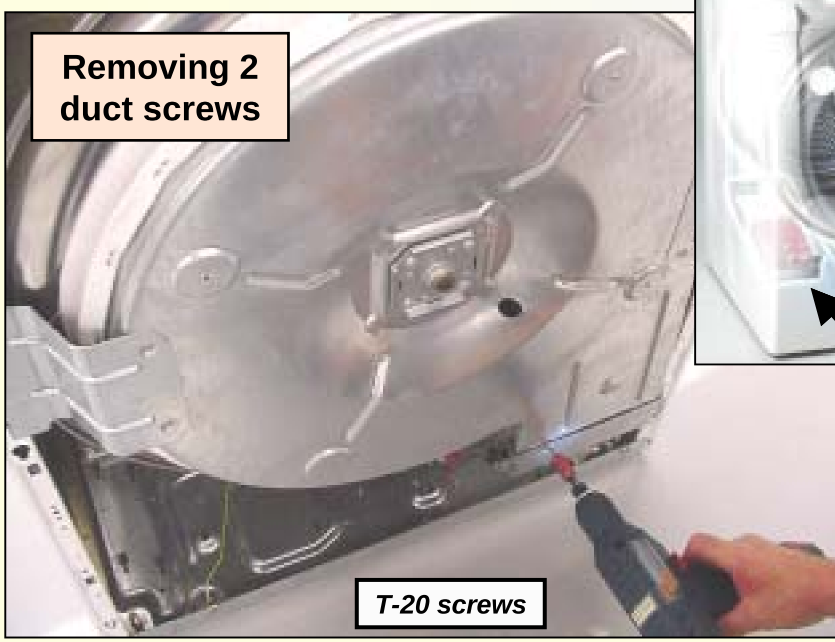
Disassembly – Electric heater

To remove electric heater:

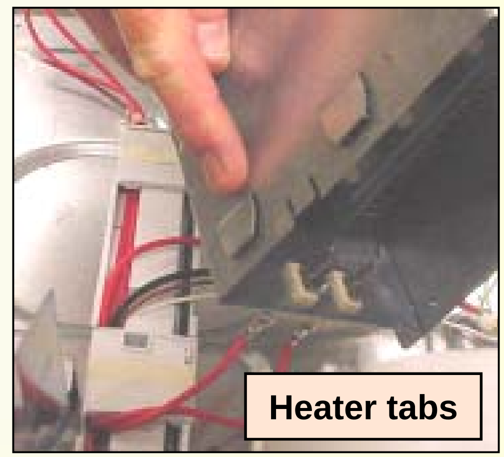
- Turn off or disconnect electric power.
- After removing rear panel screws & one rear duct screw, remove rear panel.
- Remove four rear cover screws & two duct screws, then lift rear cover with duct up and away from heater assembly. Disconnect wires.
- Slide heater toward rear of dryer until tabs slide out of slots in dryer base.













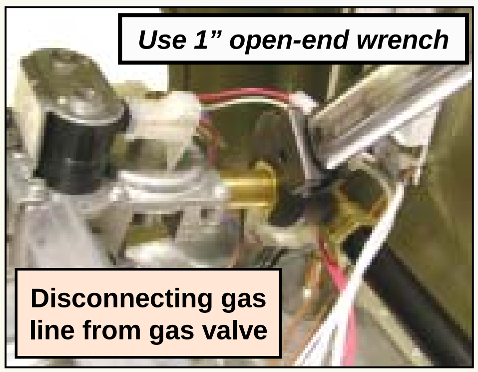


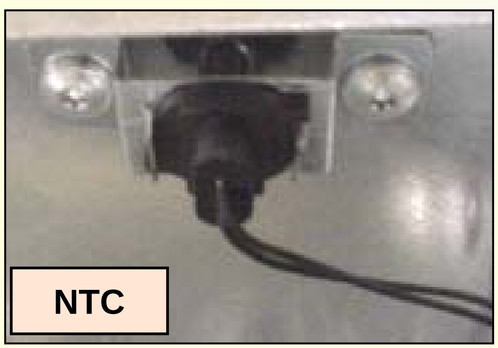
Disassembly – Gas burner (1)

To remove gas burner:

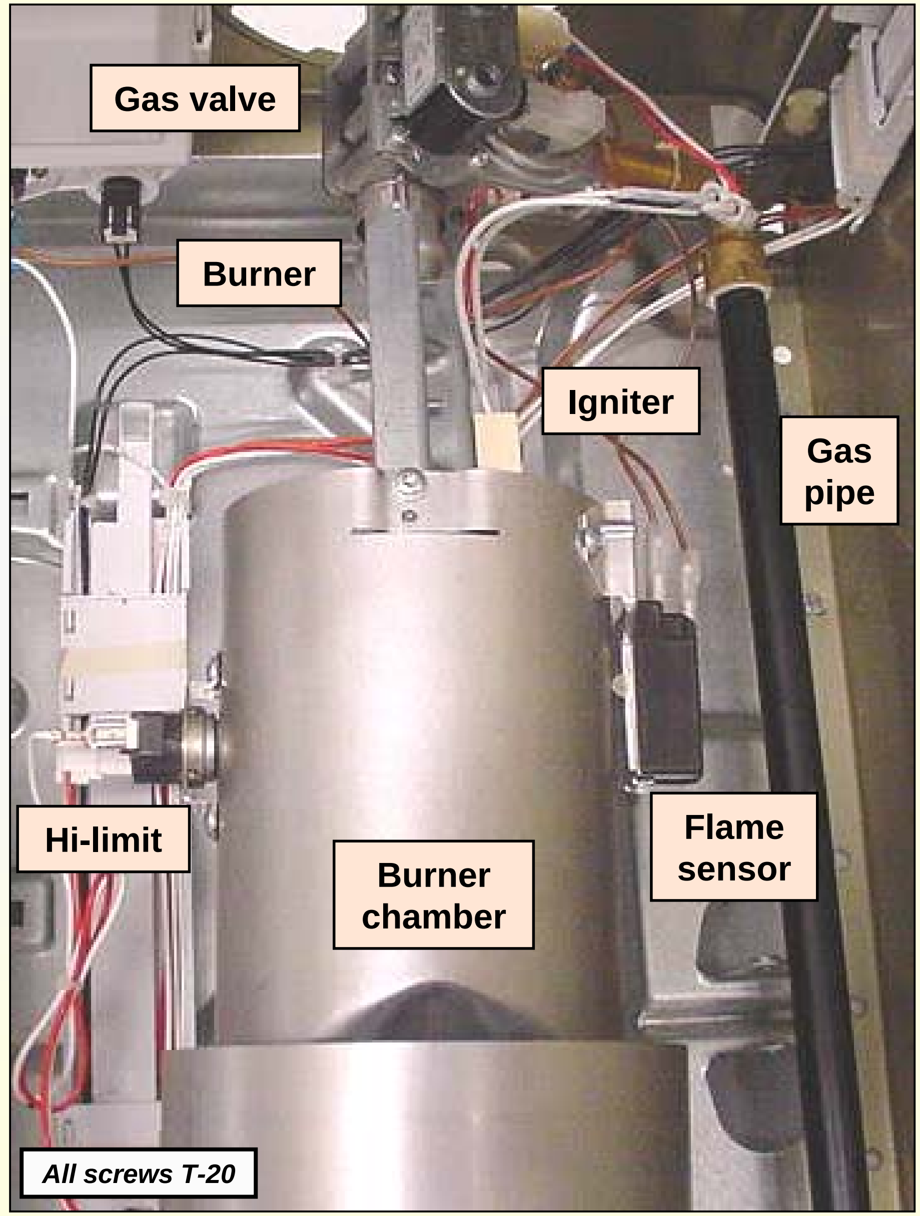
- Turn off gas supply & unplug power cord.
- After removing rear panel screws & one rear duct screw, remove rear panel.
- Remove four rear cover screws & two duct screws, then lift rear cover with duct up and away from burner assembly. If needed for better access, remove drum.
- Disconnect gas pipe & 90º elbow fitting from gas valve.









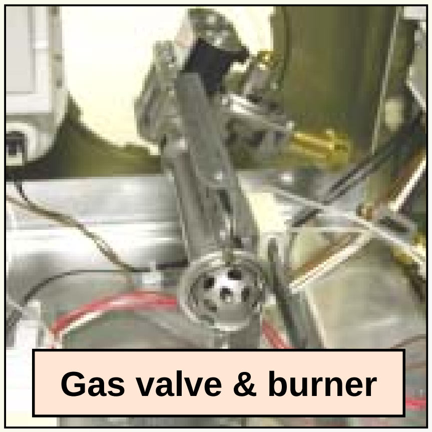


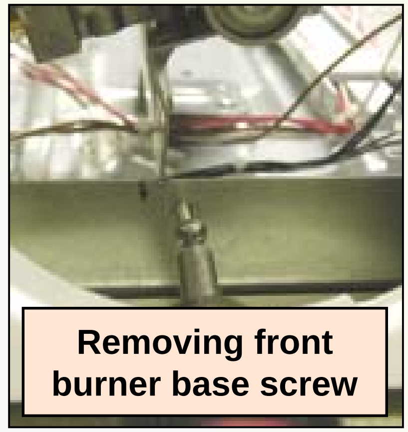
Disassembly – Gas burner (2)

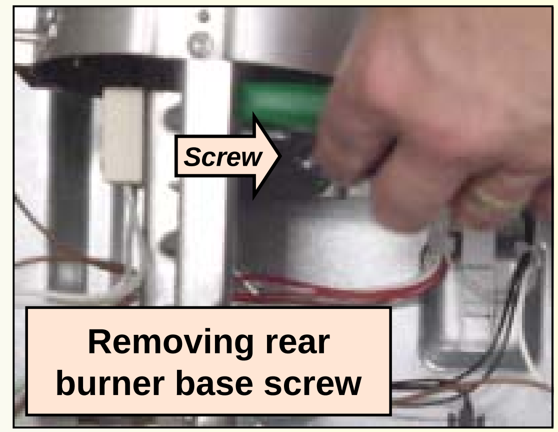
<u>To remove gas burner</u>:

- After noting connections, disconnect wires to all parts, including gas valve, igniter, flame sensor, Hi-limit & NTC. <u>Be careful to not damage igniter</u>.
- Remove burner screws, including screws holding burner bracket to base and combustion chamber and screws holding burner to bracket. All screws are T-20 Torx.


Disconnecting wires from gas valve


Gas valve & burner


Removing front burner base screw

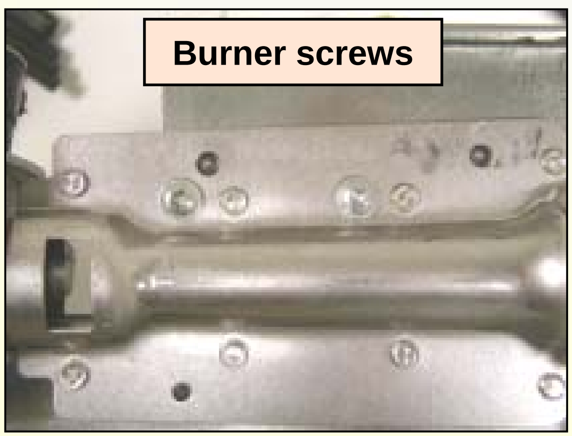


Removing rear burner base screw

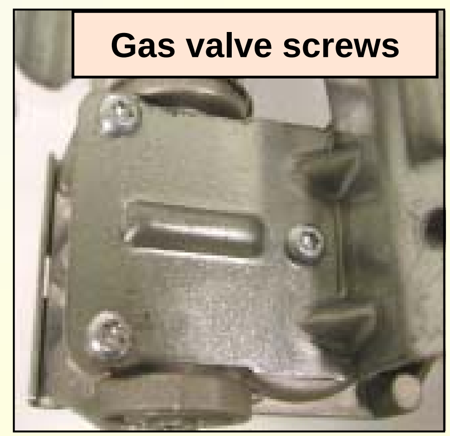
All screws T-20


Removing rear burner base screw

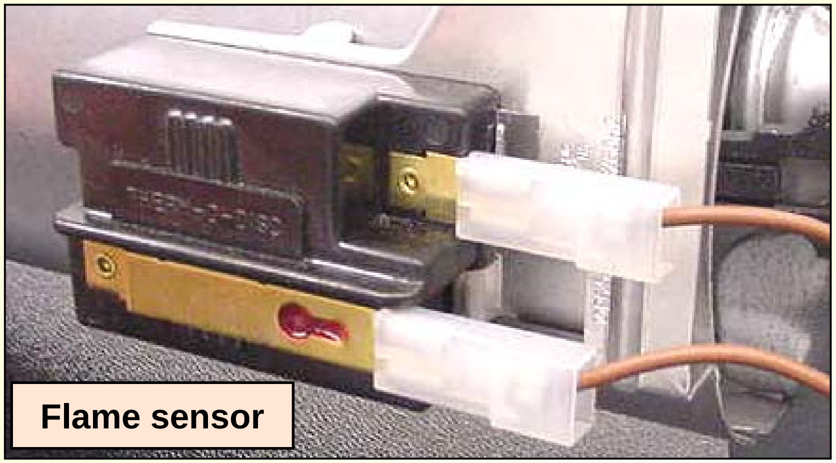
LP burner without ring


Burner screws


Burner ring screws


Gas valve screws

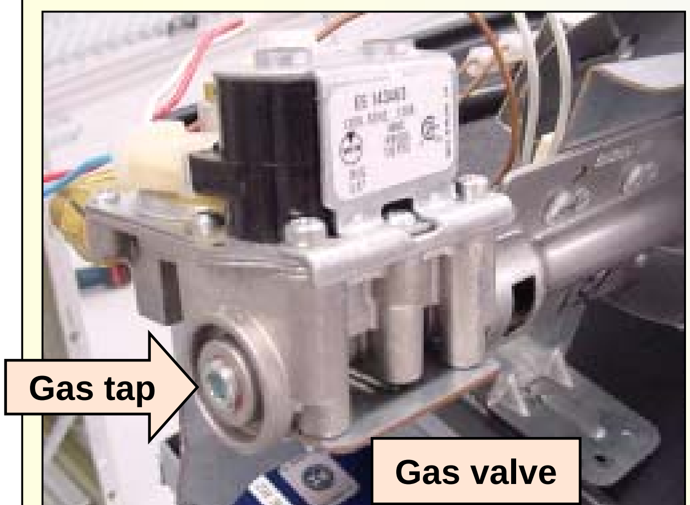
Disassembly – Gas burner (3)

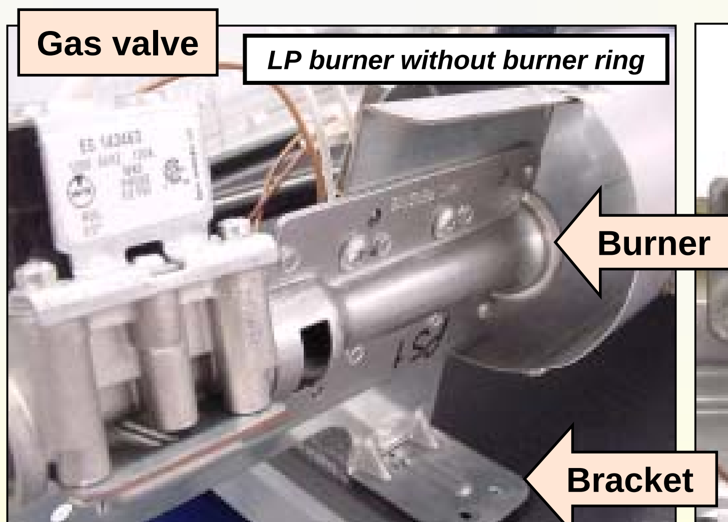


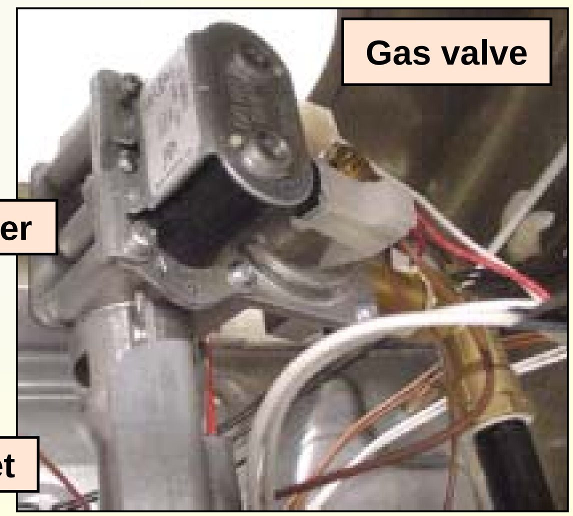


CAUTION: Igniters can be damaged if not handled with care.

Flame sensors & igniters are each held in place by one screw. Flame sensors have a tab and slot – slide them up.







Gas valves (3 screws) and burners (2 screws) are attached to the same gas valve/burner mounting bracket. Brackets are held to dryer bases by 2 screws (@ front of gas valves & rear of burners) & to burner chambers by one screw.

Disassembly -- Rear Main Drum Sleeve Bearing



Drum cover with sleeve bearing

Drum



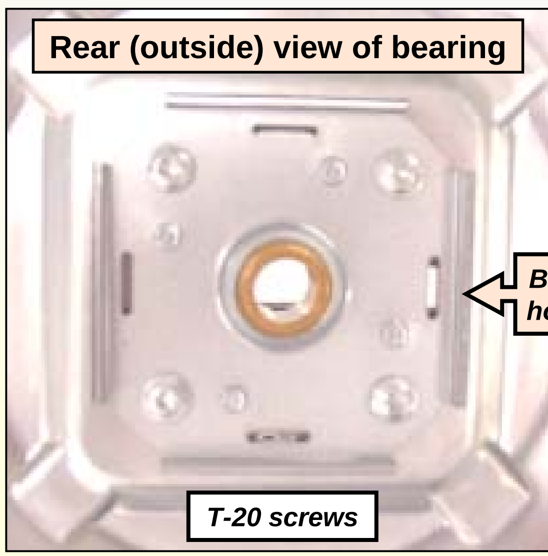
Removing spring clip from drum shaft

HINT: To remove sleeve bearing from rear of drum (& rear cover):

- Remove spring clip positioning drum shaft in bearing.
- Remove bearing housing with bearing by unscrewing four (4) T-20 screws.



Front (inside) view of bearing



Rear (outside) view of bearing

Bearing housing

T-20 screws



Don't forget the shaft washer.

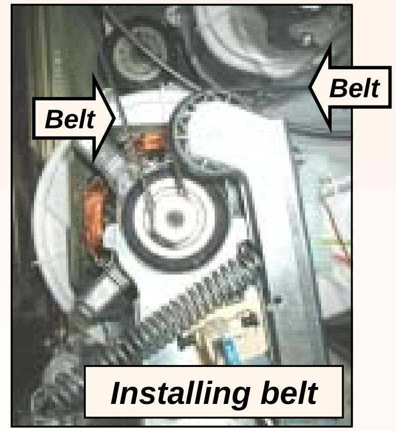
Shafts are permanently attached to drums. If shafts are damaged, drums have to be replaced.

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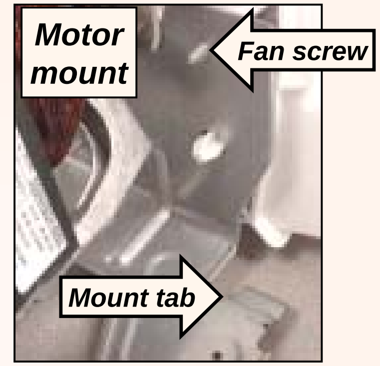
Reassembly – Drum/Fan Drive Motor

<u>Tips when installing drum/fan drive motor</u>:

- Lift rear of motor mount up and slide entire assembly toward front of dryer.
- While holding motor shaft, not rotor fins, install fan blade onto motor shaft. Since shaft has left-handed thread, rotate fan counterclockwise.
- Make sure broken belt switch has been reset whenever working on motor, replacing belt or having removed drum for access. To reset broken belt switch, push onto left side (black) plastic plunger (viewing rear of motor). Plunger will click when pushed. <u>If switch hasn't been reset, motor and heater will not work</u>.

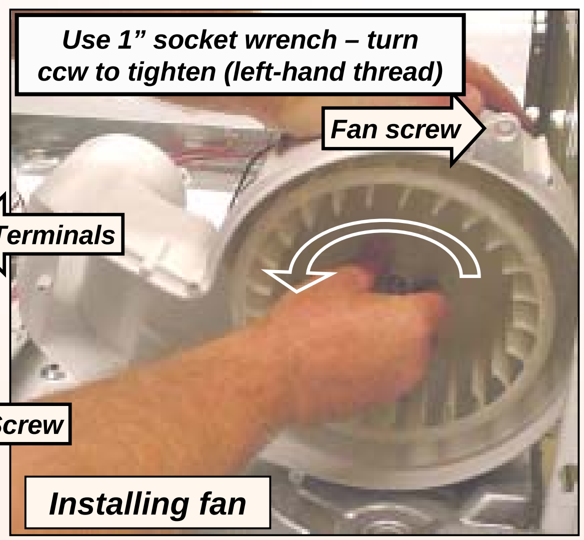


Installing belt

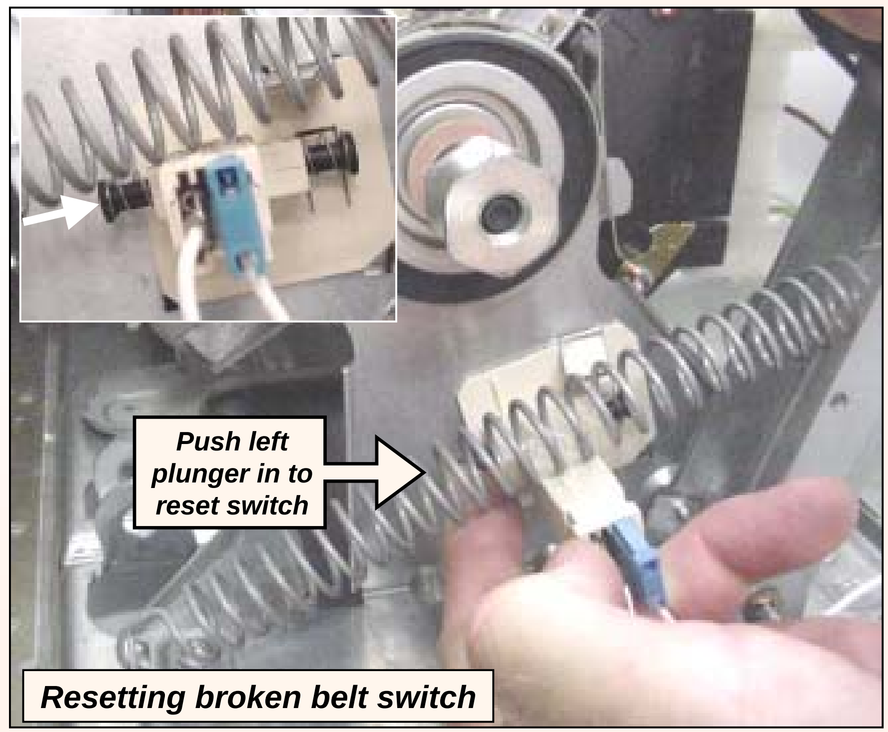




Belt tensioner



Installing fan



Resetting broken belt switch

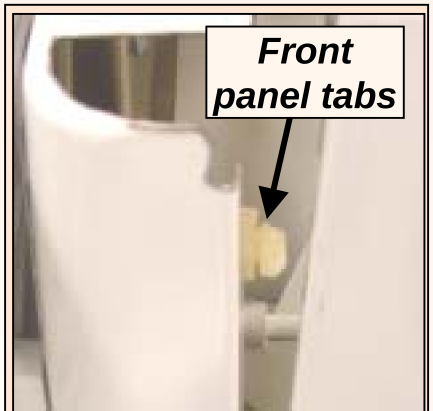
Reassembly – Front Panel & Front (Bearing) Shield

Gas dryer with front panel removed





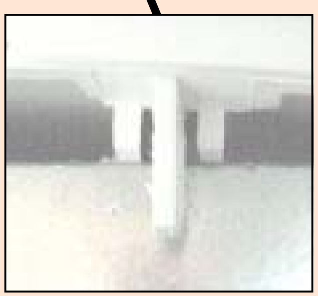
<u>HINT</u>: When aligning front panel tabs on frame, make sure door seal is seated properly.



<u>HINT</u>: Front panel hangs to frame by six tabs, three per side. <u>Panels can be tricky to reinstall</u>, especially getting all six tabs to engage frame.

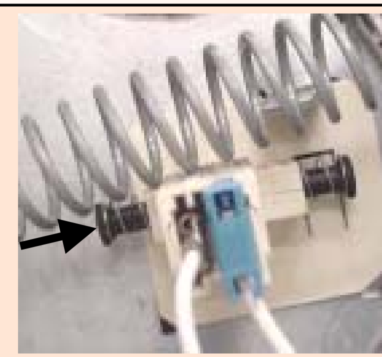
Rear access is best for most repairs.

<u>HINT</u>: When installing front (bearing) shield, make sure notch on bottom is seated on frame.

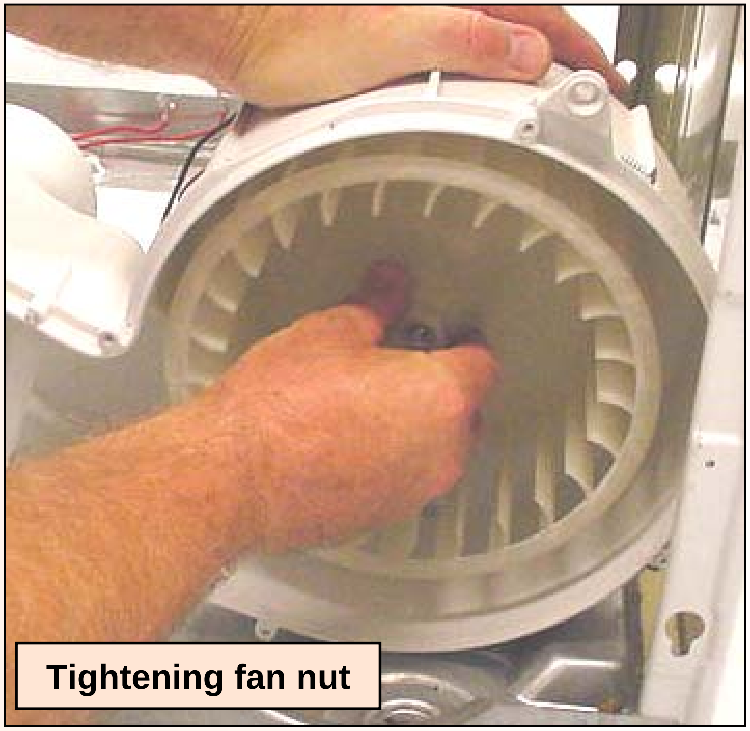




<u>HINT</u>: Reconnect drum belt <u>after</u> front panel installation so drum (& support wheels) won't be in tension. After belt installation, reset broken belt switch.

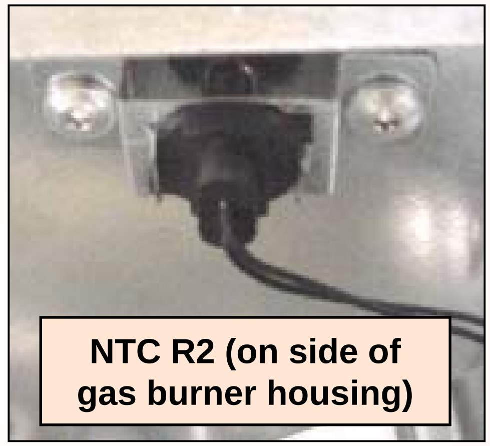


Reassembly -- Fan, Hi-Limit & NTC R2

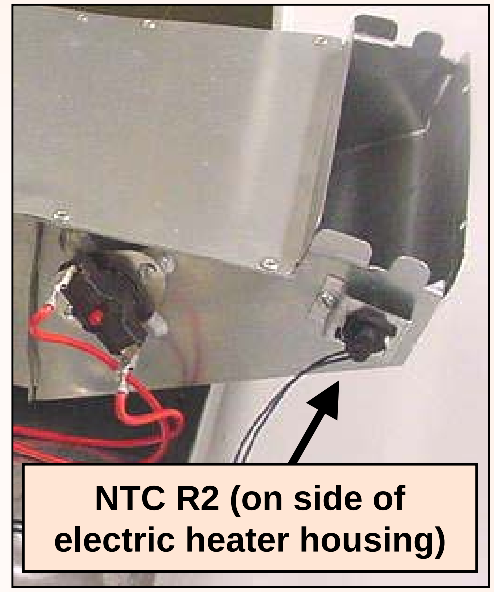


Tightening fan nut

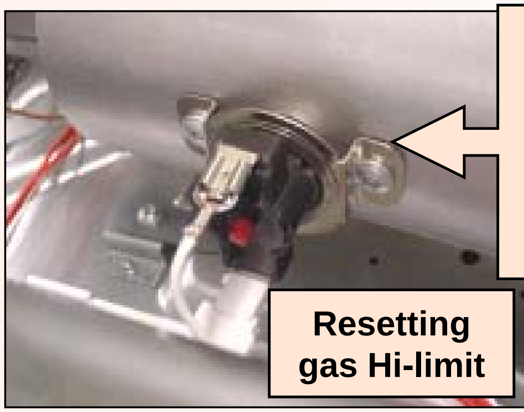
HINT: Make sure fan is tight. If fan nut won't tighten down adequately, install a lockwasher.



NTC R2 (on side of gas burner housing)

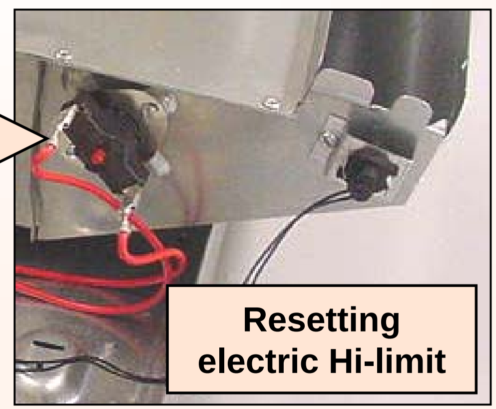


NTC R2 (on side of electric heater housing)



Resetting gas Hi-limit

NOTE: Hi-limits (high temp cutouts), located on heater/burner housings, trip @ **347ºF (electric)** or **347ºF (gas)**. To reset Hi-limits, press **red** button.



Resetting electric Hi-limit



Fan

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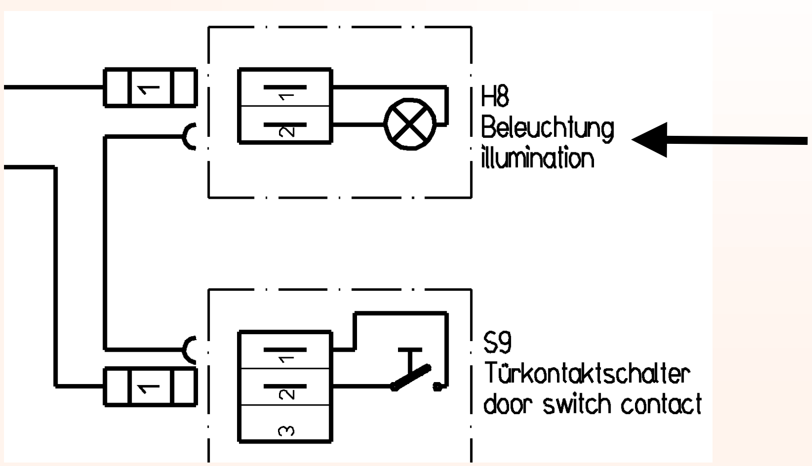
Reassembly -- Drum Interior Light

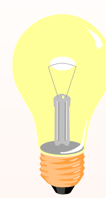






The light is readily accessible when the door is opened.





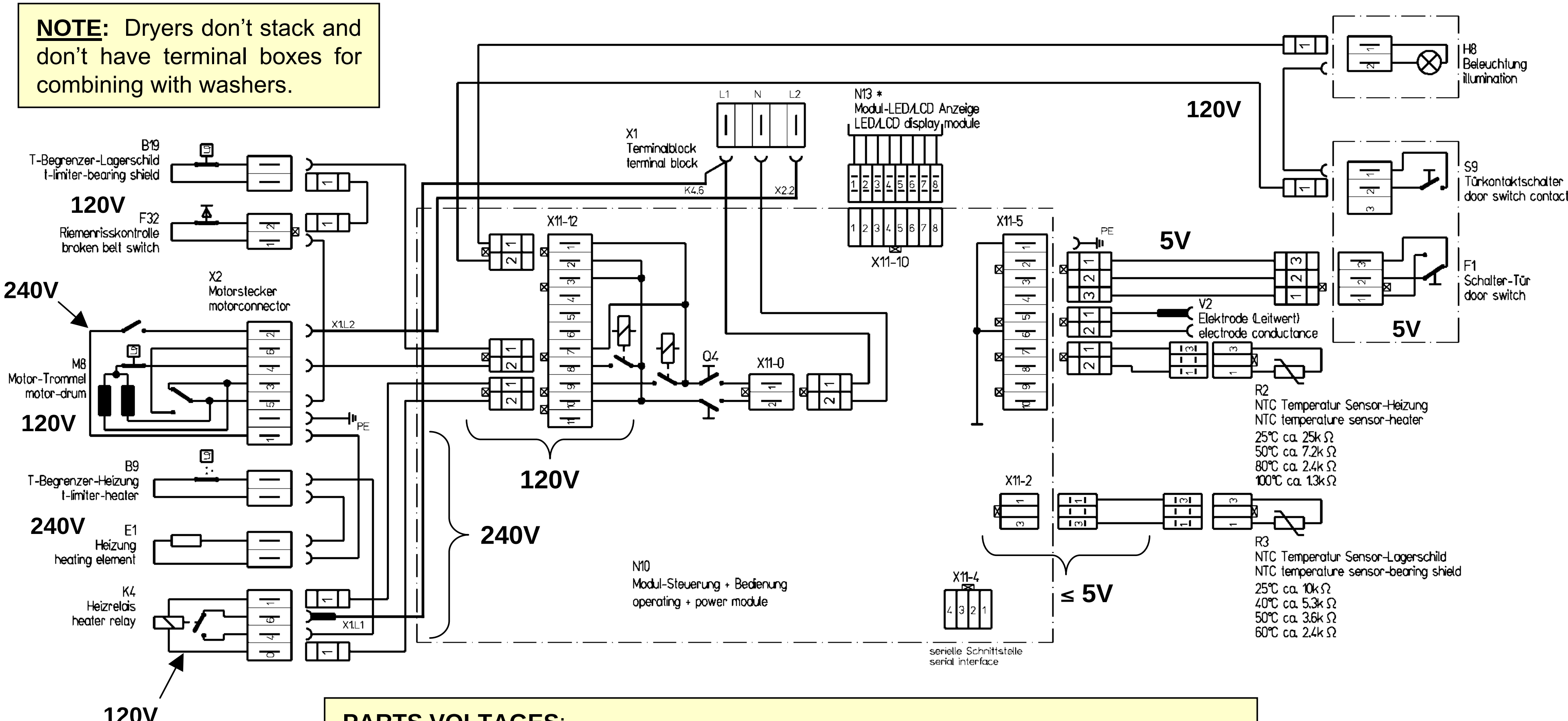
HINT: To access bulb, unscrew one screw in cover and pull hinged cover downward.

NOTE: Bulb rated 120V/10W and uses C7 base.

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WTMC33/63, WTXD53/83 Electric Dryer Wiring Diagram (American/Canadian models)

NOTE: Dryers don't stack and don't have terminal boxes for combining with washers.



NOTE: Motor cutout switch cuts out the heater if the motor shuts down.

PARTS VOLTAGES:

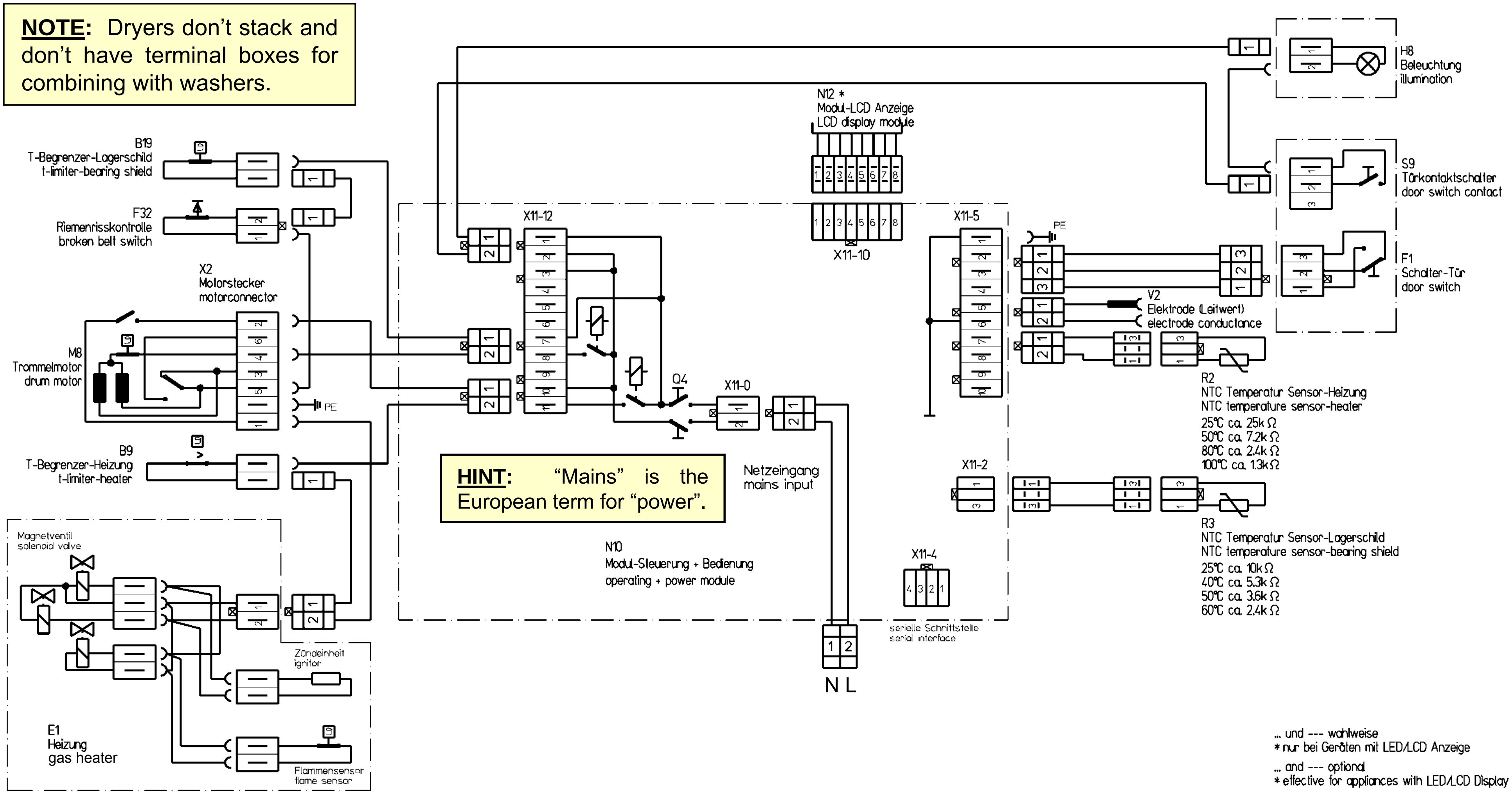
- **240V –** Heater, heater HTC (Hi-limit), heater relay (to heater).
- **120V –** Control module, drum/fan motor, broken belt switch, light (lamp), door lamp switch, HTC (Hi-limit) @ lint screen, heater relay (to control module).
- **5V or less –** Door switch (to control module), NTC (heater), NTC (lint screen), moisture sensor.

NOTE: Heater cycles on and off as needed to keep temperatures at appropriate levels.

BOSCH / SIEMENS

WTMC65/WTXD85 Gas Dryer Wiring Diagram

NOTE: Dryers don't stack and don't have terminal boxes for combining with washers.



HINT: "Mains" is the European term for "power".

NOTE: Burner cycles on and off as needed to keep temperatures at appropriate levels.

WTMC/WTXD Service Tips – Ratings (1)

- **Electric dryers** rated 208-240VAC, 22A, 60 Hz, 5280W. Use test program to select voltage.
- **Gas dryers** rated 120VAC, 15A, 60 Hz, 1500W (12A max.) & 18,500 BTU. Standard is natural gas (5-14 " WC inlet/3.5" WC to burner) – LP kit available. 3/8" NPT (female) gas connection. Dryers rated up to 7700' (so no high altitude kit is provided).
- **Canadian electric models** use 6' power cords with NEMA 14-30P 240V, 30A, 4-wire plugs, which mates to NEMA 14-30R outlets.
- **Gas models** use 6' power cords with NEMA 5-15P 15A, 3-wire plugs, which mate to standard grounded outlets.
- **Drum/fan motors** rated @ 120VAC, 60 Hz, 1/3 HP, 5A, 1725 RPM, class B insulation, thermally protected.
- **UL listed** (U.S. & Canada)

HINT: Dryers can be run on 240V **or** 208V. To change voltage from 240V to 208V, use voltage changeover test (8th position from right).





NOTE: The **only** difference between WTMC33/63US & CN electric dryers is Canadian models have power cords. Drying cycles and heating levels are identical.

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WTMC/WTXD Service Tips – Ratings (2)

The maximum permitted length for both rigid and flexible metal duct is shown in the table below.

Number of 90° Turns or Elbows	Rigid Duct	Flexible Duct
0	66 ft. (2011 cm)	45 ft. (1372 cm)
1	56 ft. (1707 cm)	36 ft. (1097 cm)
2	48 ft. (1463 cm)	29 ft. (884 cm)
3	39 ft. (1189 cm)	22 ft. (671 cm)
4	30 ft. (914 cm)	16 ft. (488 cm)

NOTE: The **only** difference between WTMC33/63US & CN electric dryers is Canadian models have power cords. Drying cycles and heating levels are identical.

- **WTZ1280 (B)/WZ20380 (S) LP kits** provides 18,000 BTU/hr. (up to 7700’ elevation) and 11” WC pressure to burner with 11” – 14” WC inlet pressure.
- **Gas igniter resistance** ≤ 76Ω @ room temperature.
- **NTC R2 ratings (@ heater)**
  - @ 25ºC (77ºF) = 25 kΩ
  - @ 50ºC (122ºF) = 7.2 kΩ
  - @ 80ºC (176ºF) = 2.4 kΩ
  - @ 100ºC (212ºF) = 1.3 kΩ
- **NTC R3 ratings (@ lint screen)**
  - @ 25ºC (77ºF) = 10 kΩ
  - @ 40ºC (104ºF) = 5.3 kΩ
  - @ 50ºC (122ºF) = 3.6 kΩ
  - @ 60ºC (140ºF) = 2.4 kΩ



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WTMC/WTXD Service Tips – Infrequently Asked Questions (1)

- **Vent location** – Rear (bottom or right side optional with kits)
- **Noise level** – 67 dB (WTMC33/WTXD53) or 66 dB (WTMC6300/6500, WTXD83/85)
- **Net weight** – 125 lbs. (56 kg) electric & 127 lbs. (57 kg) gas
- **Dimensions** – 36.9" H x 27" W x 31.6" D (93.7 cm x 68.7 cm x 80.3 cm)
- **Output with clean lint filter** (18 lbs. Regular Cotton / 9 lbs. Permanent Press @ max. duct) = 115/ 107 cfm. (with dirty lint filter = 86 / 83 cfm).
- **Exhaust temperature** – Depends on cycle used. Maximum is < design standard of 200ºF (93.5ºC) & front shield hi-limit rating of 194ºF (90ºC).
- **Condensation dryers available** – No
- **Reversible door** – Yes (can put hinge on right side using kit)
- **Door opening** – 19.7" (50 cm)
- **Duct length (max.)** – 66' (20 m) of 4" rigid metal duct
- **Drum speed** – 50 RPM



NOTE: The **only** difference between WTMC33/63US & CN electric dryers is Canadian models have power cords. Drying cycles and heating levels are identical.

WTMC/WTXD Service Tips – Infrequently Asked Questions (2)

- **<u>Power outages</u>** – Dryers enter standby mode for power interruptions over 10 minutes long.
- **<u>Door opened during cycle</u>** – Dryers can be restarted once doors are closed.
- **<u>Sales demo mode</u>** – Available. Push and hold ***Start/Stop*** & ***Delicates*** buttons, then rotate ***cycle selector knob*** to ***40 minute timed dry*** (WTMC33) or ***Air Fluff*** (WTMC63/65). Push ***Start/Stop*** button to enter or stop sales demo mode.
- **<u>Hi-limit temperature settings</u>** – B9 resettable type @ heater: 347ºF (175ºC) both electric & gas. B19 one-time fuse @ lint screen (front shield): 194ºF (90ºC).
- **<u>Light bulb ratings</u>** – 120V, 10W, uses C7 base.
- **<u>Empty drum detection</u>** – Dryers shut down after 11 minutes if no moisture detected. Can immediately restart dryers.



<u>NOTE</u>: The **<u>only</u>** difference between WTMC33/63US & CN electric dryers is Canadian models have power cords. Drying cycles and heating levels are identical.

WTMC/WTXD Service Tips – Drum/Fan Drive Motor

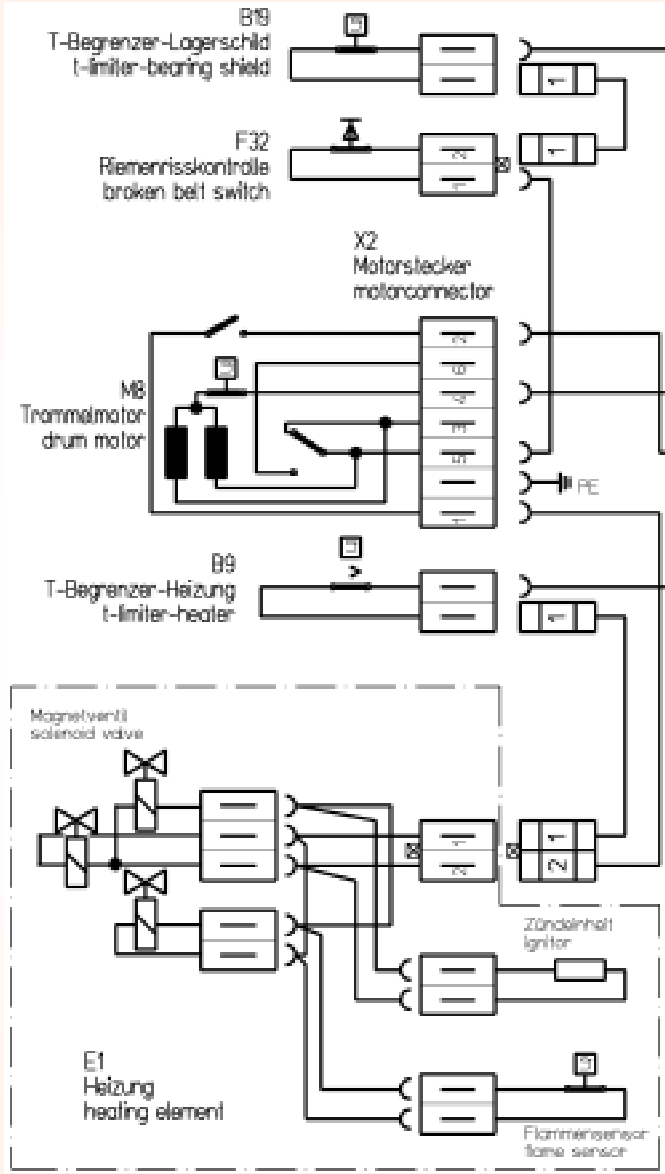
The main drive motor drives the drum & fan:

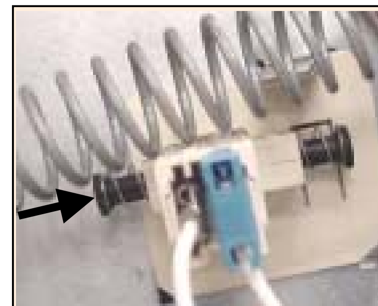
- Its connected in series to the heater/burner circuit so the heater/burner are cut out if the motor fails.
- Its connected in series with the broken belt switch & Hi-limit (@ lint screen) so the motor is cut out if the belt breaks or the temperature at the front of the dryer gets too high.
- If the heater/burner won't work, check the motor as well. Make sure the broken belt switch is reset.
- If the motor won't work, check the lint screen & duct for excessive lint, the belt/broken belt switch & the motor. Make sure the broken belt switch is reset.





Gas dryer wiring shown





HINT: To reset the broken belt switch, push in the left black plunger (viewing rear of motor).

HINT: Remove rear panel to access drum drive motor, belt/pulley & electric heater/gas burner.

WTMC/WTXD Service Tips – Electric Heater Assembly

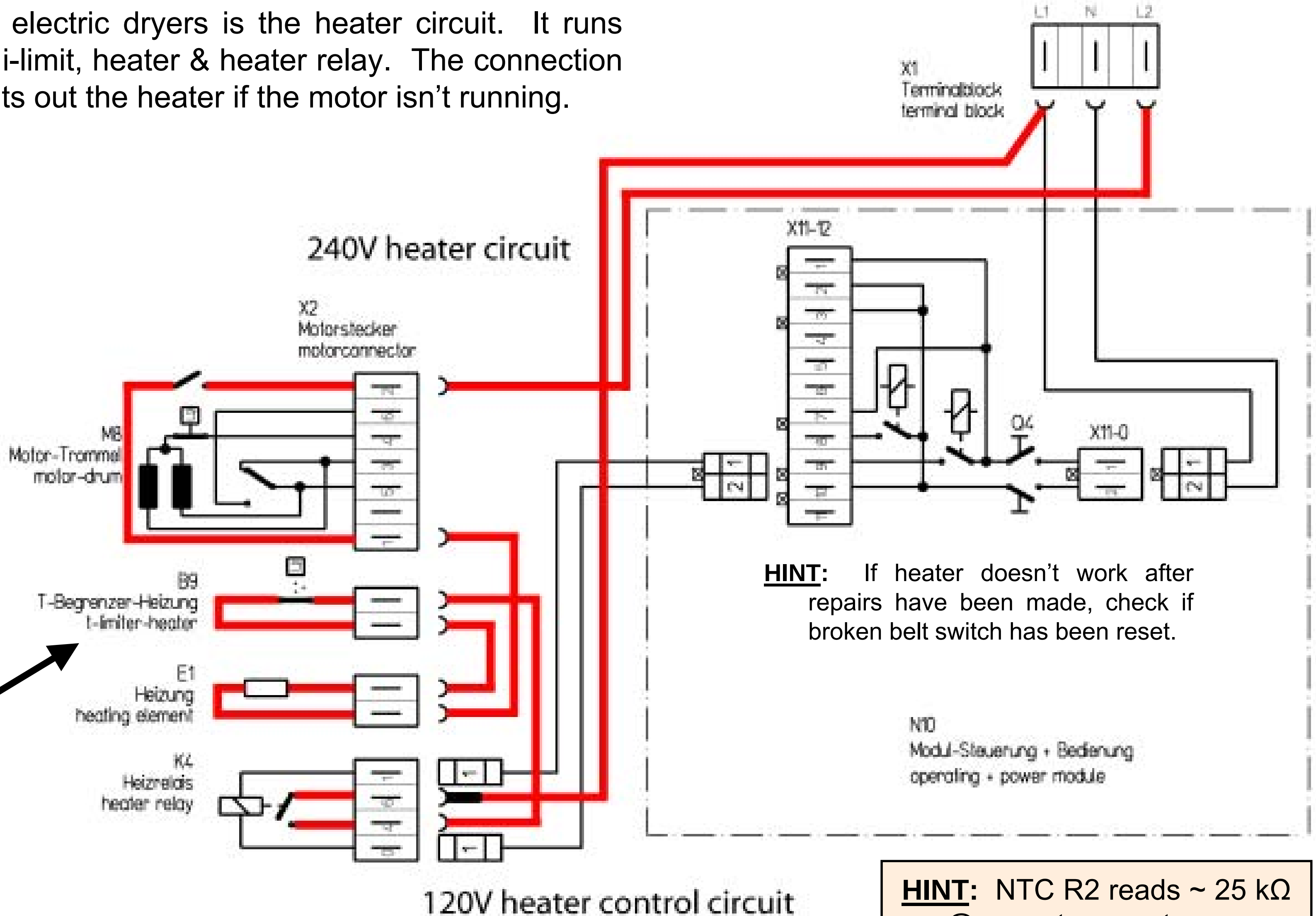
Only 240V circuit in electric dryers is the heater circuit. It runs through the motor, Hi-limit, heater & heater relay. The connection through the motor cuts out the heater if the motor isn't running.



Electric Heater Assy.



Resetting Hi-Limit



HINT: If heater doesn't work after repairs have been made, check if broken belt switch has been reset.

HINT: NTC R2 reads ~ 25 kΩ @ room temperature.

HINT: Hi-Limit (safety cutout) trips @:
- 175ºC (347ºF) for electric
- 175ºC (347ºF) for gas

NOTE: Heaters cycle on and off as needed to keep temperatures at appropriate levels.

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WTMC/WTXD Service Tips – Gas Burner Assembly (1)

HINT: NTC R2 reads ~ 25 kΩ @ room temperature.

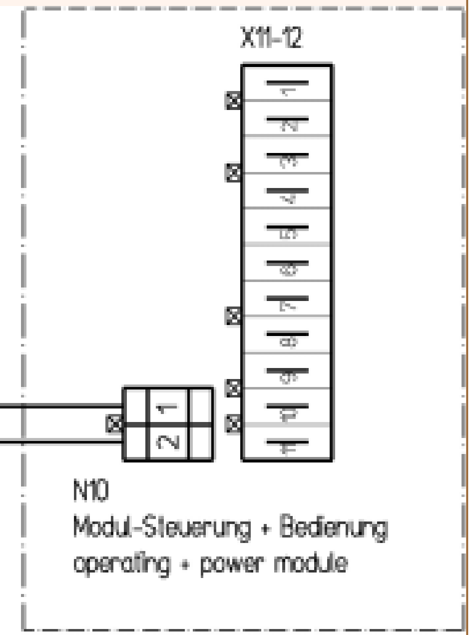
HINT: Hi-Limit (safety cutout) trips @:
- 175°C (347°F) for electric
- 175°C (347°F) for gas

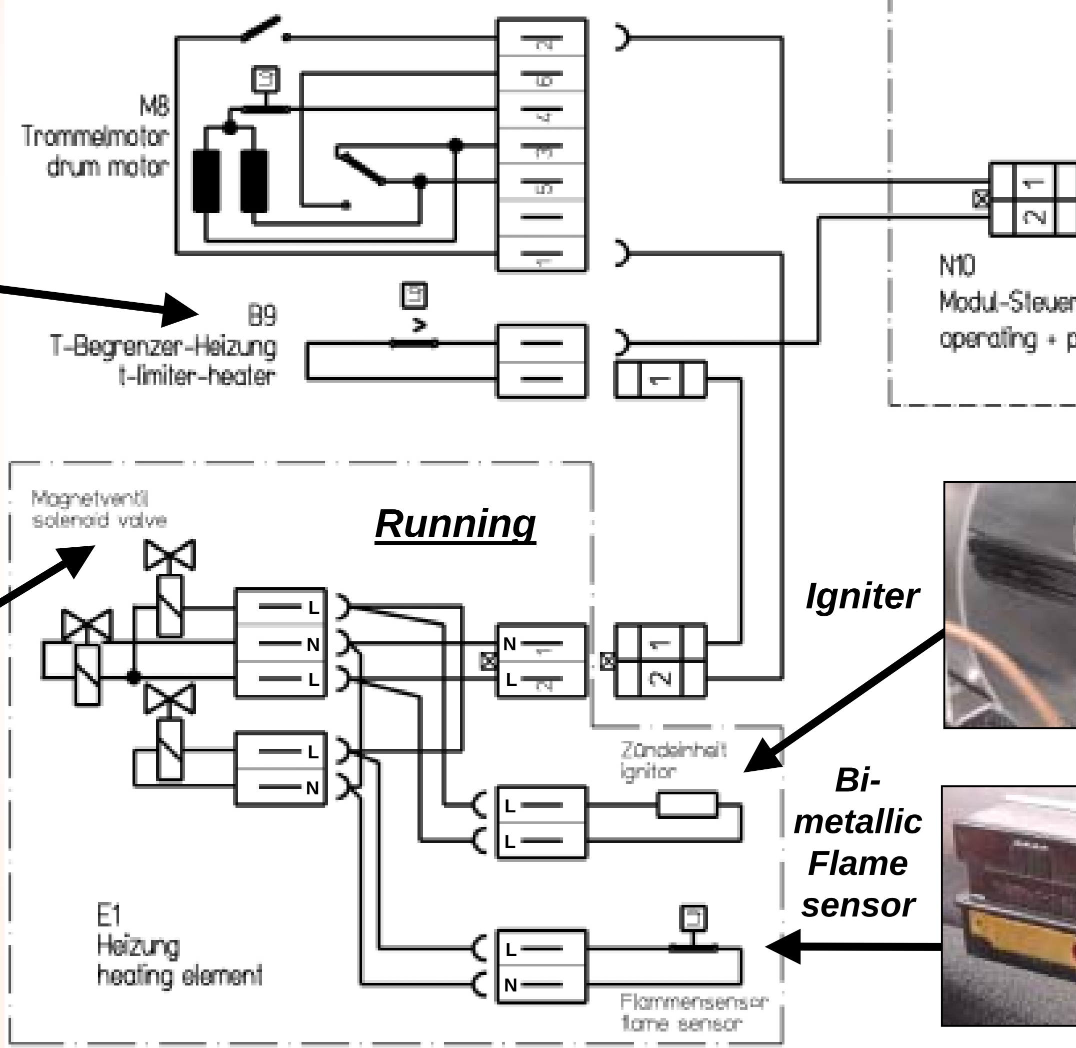
NOTE: Burners cycle on and off as needed to keep temperatures at appropriate levels.

Like electric dryers, the gas dryer burner circuit runs through the motor & Hi-limit. The connection through the motor cuts out the burner if the motor isn't running.



Resetting Hi-Limit







Igniter



Bi-metallic Flame sensor



Gas Burner Assy.

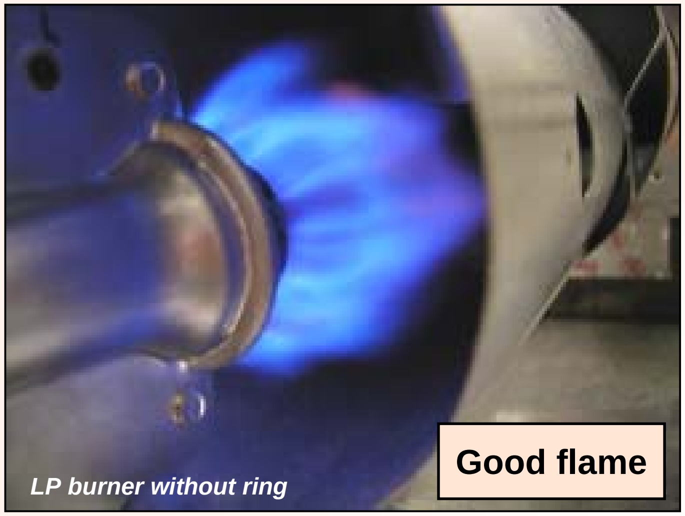




Gas valve

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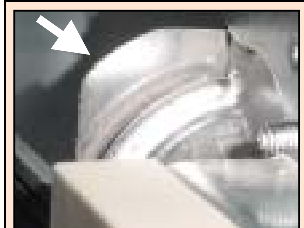
WTMC/WTXD Service Tips – Gas Burner Assembly (2)



Good flame – fan pulls air through burner cavity and air flows freely through burner air holes. Flames are blue, compacted and uniformly distributed – flames have "roaring" sound.



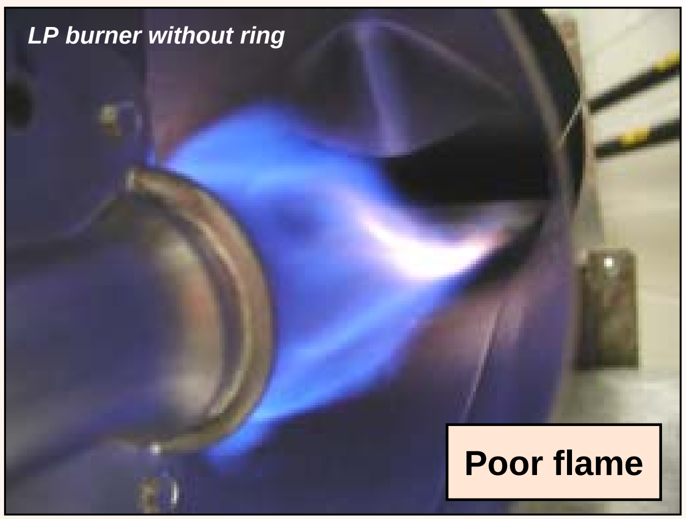
Gas burner



Natural gas burner ring (not used for LP)



For best results, fan must be running and burner air holes must be clear.



Poor flame – poor air flow through burner (from blocked burner air holes) causes a lazy, long and quiet flame with some yellow.

NOTE: Burners cycle on and off as needed to keep temperatures at appropriate levels.

HINT: If burner doesn't work after repairs have been made, check if broken belt switch has been reset.



HINT: For best results, lint screen should be clean and fan be tight onto motor shaft.

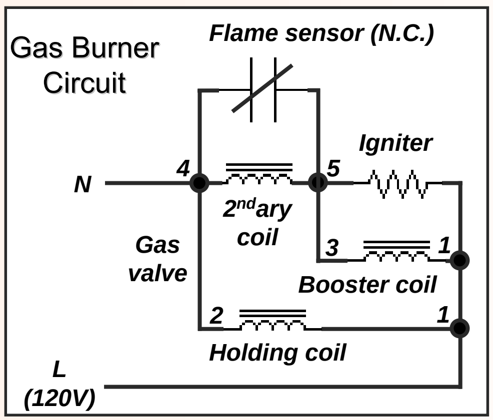


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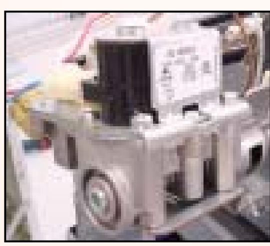
WTMC/WTXD Service Tips – Gas Burner Assembly (3)

Gas Burner Operation:

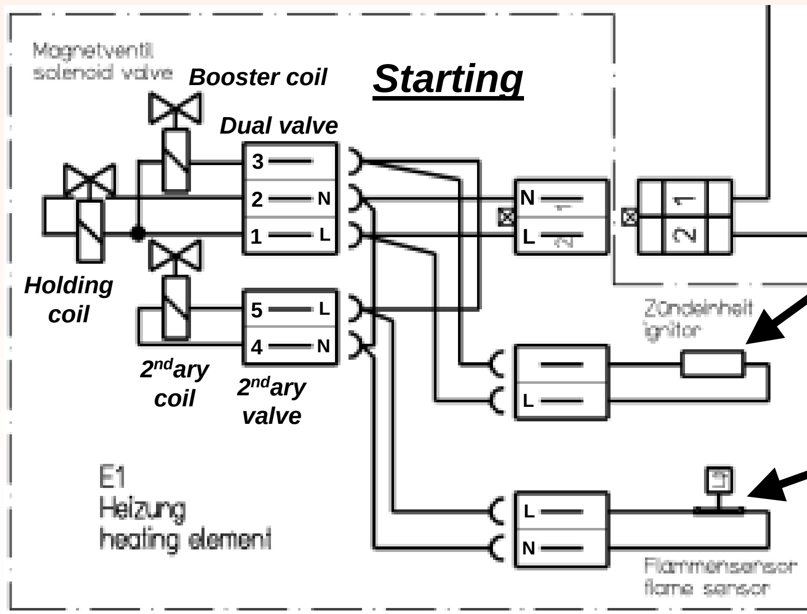
- ***Starting (& flame out)*** – Cool flame sensor is closed, which bypasses secondary coil & turns on igniter & holding/booster coils (to open dual valve). Secondary coil is off (so no gas flows to burner). Igniter current is ~ 4 A.
- ***Running*** – Igniter heats up & opens flame sensor, which turns off igniter & turns on secondary coil (gas now flows to burner). Hot igniter ignites gas – flames keep flame sensor open. Booster coil turns off since current now flows thru secondary coil & igniter (~ .1 A) – holding coil stays energized so gas keeps flowing.



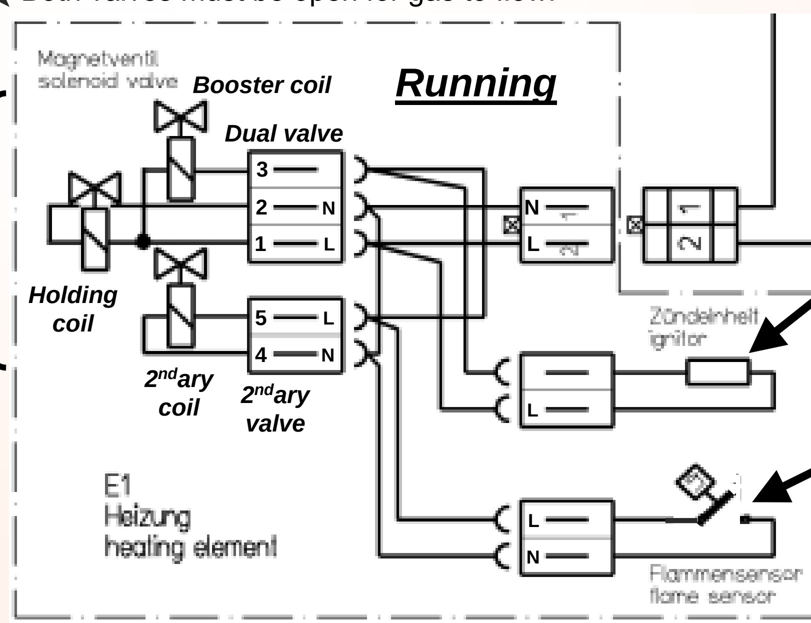




Split-coil gas valves have a regulator, 3 coils (holding, booster & secondary) & 2 valves (dual & secondary).



✹ Both valves must be open for gas to flow.



LP assy. shown (no burner ring)



Igniter on



Bi-metallic Flame sensor closed



Igniter off



Bi-metallic Flame sensor open

WTMC/WTXD Service Tips – Gas Igniter & Flame Sensor

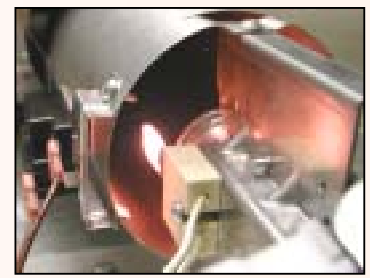
The igniter, located in the front of the burner assembly (near the burner & flame sensor), reliably ignites natural gas & LP flames.

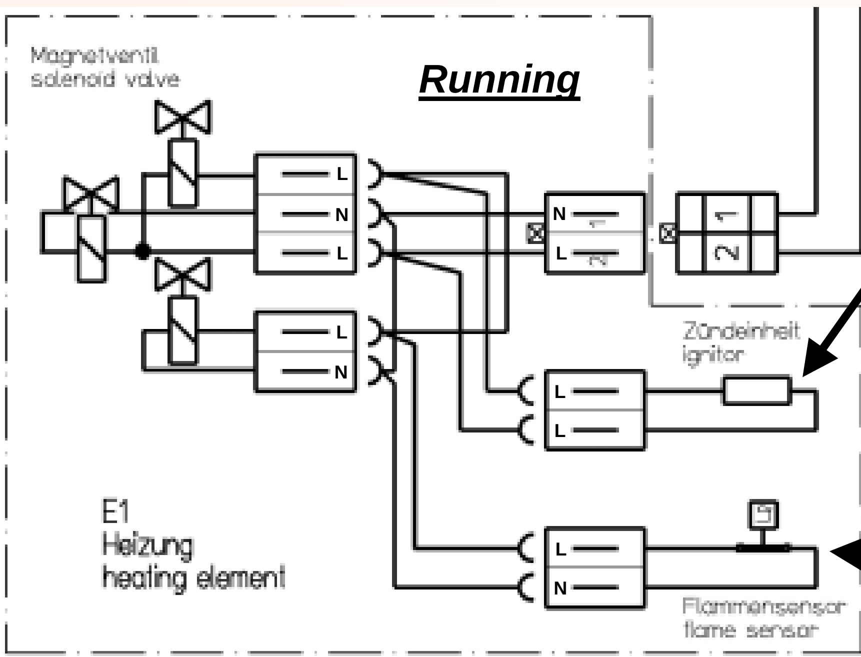
CAUTION: Igniters can be damaged if not handled with care.

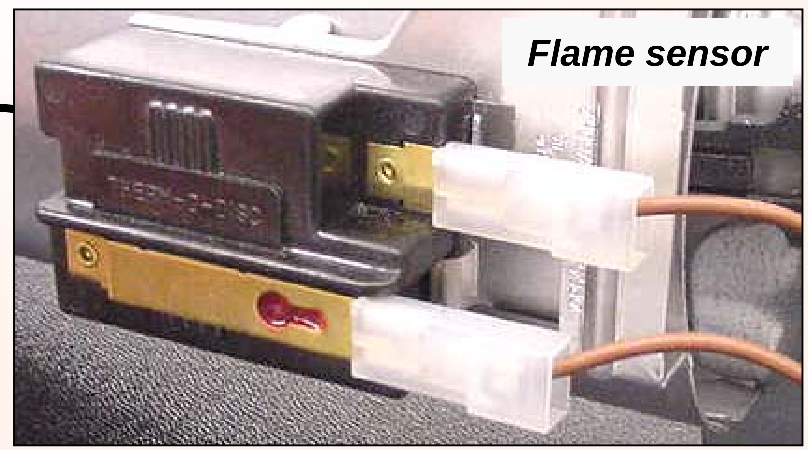


NOTE: Igniter resistance ≤ 76Ω @ room temperature.

NOTE: Igniters glow and reach ~ 2100ºF after 30 seconds.







NOTE: Sensors react to flame out in 30 - 60 seconds.

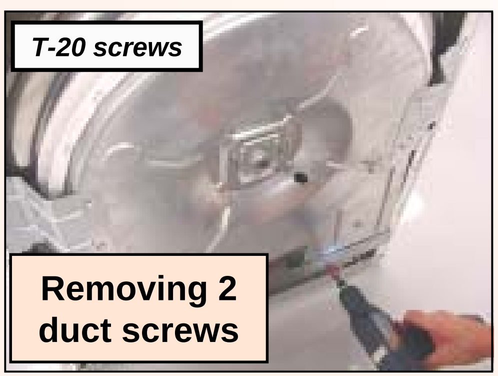
The bi-metallic flame sensor, located in the front of the burner assembly (near the burner & igniter), reliably re-ignites natural gas & LP flames should they ever go out.

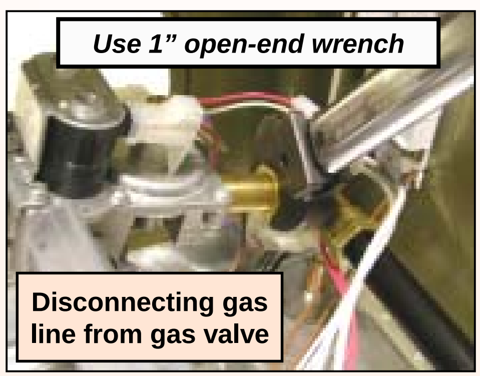
WTMC/WTXD Service Tips – LP Gas Kits (1)

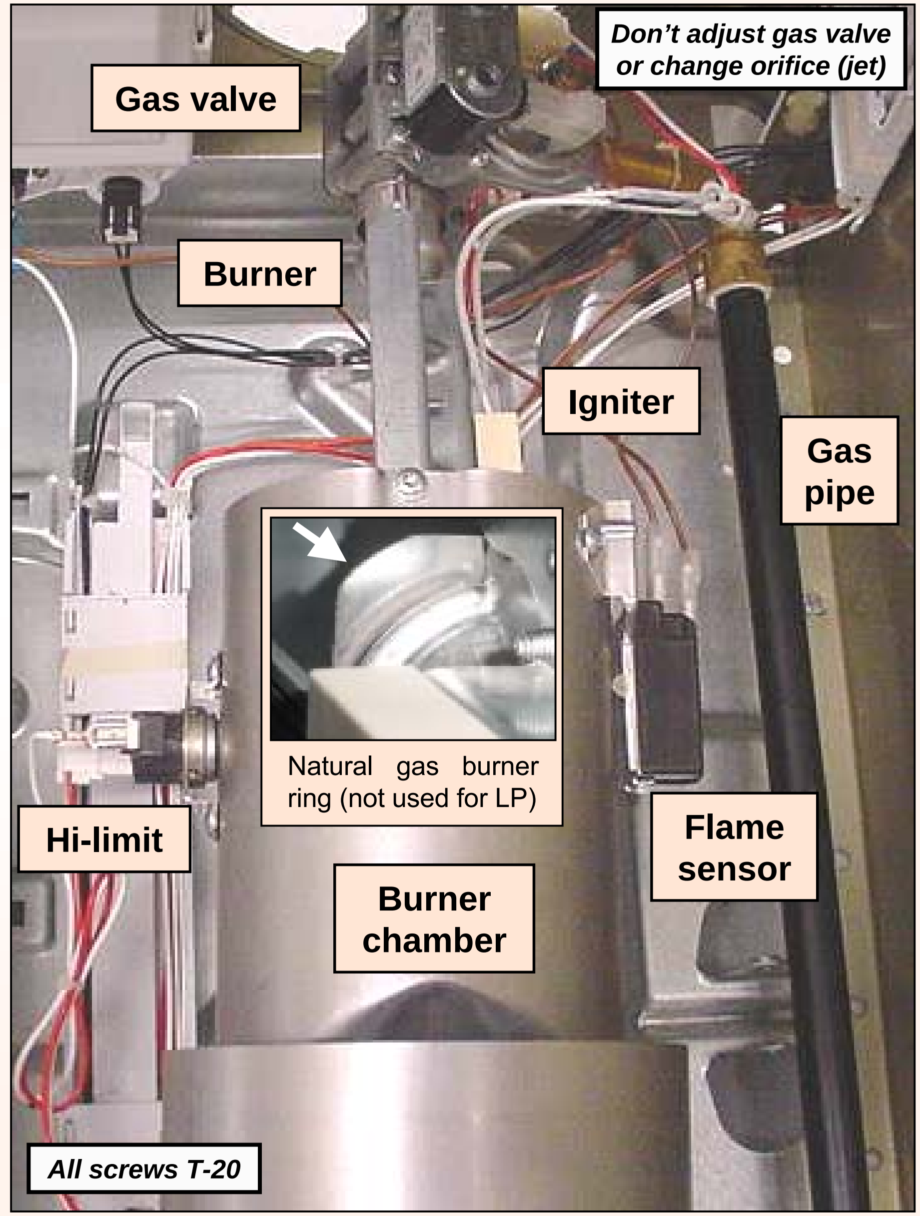
WTMC65 / WTXD85 gas dryers are set up from the factory for natural gas (for elevations up to 7700'). Use LP gas kits **WTZ1280** or **WZ20380** (available from new equipment dealers) to convert dryers to LP (for elevations up to 7700').

Using WTZ1280 (B)/WZ20380 (S) LP kits:

- Follow kit instructions carefully. These general guidelines don't include the entire kit instructions.
- LP manifold pressure will be 11" wc after the kit is installed. Inlet pressure should be ~ 11" – 14" wc.
- LP rating (up to 7700' elevation) will be 18,000 BTU/hour after the kit has been installed.
- Turn off gas supply & unplug power cord.
- Remove rear panel & rear drum cover. Remove drum (for better access).
- Disconnect wire harness, gas pipe & 90º elbow fitting from gas valve.







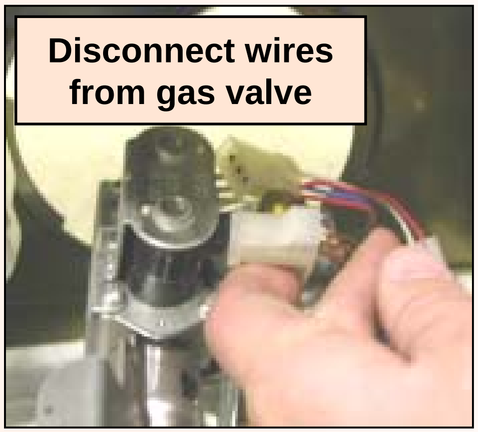
BOSCH / SIEMENS

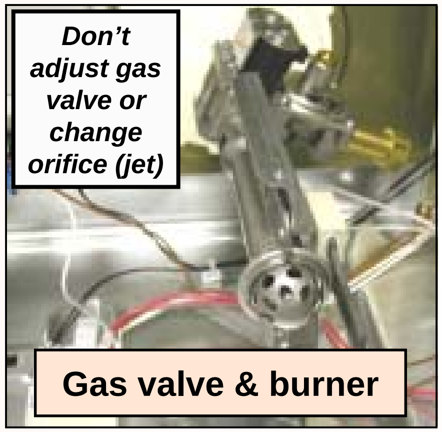
WTMC/WTXD Service Tips – LP Gas Kits (2)

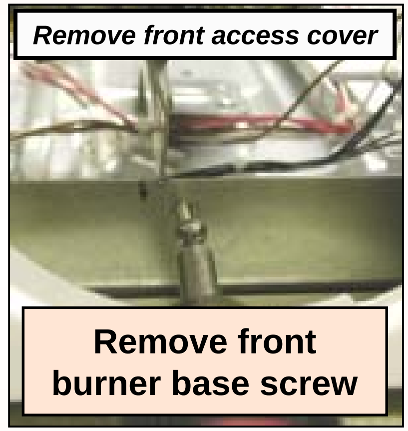
Using WTZ1280 / WZ20380 LP kits:

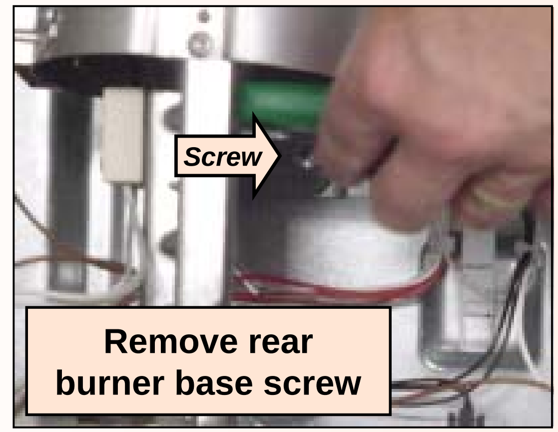
- After noting connections, disconnect wires to all parts, including gas valve, igniter, flame sensor, Hi-limit & NTC. **Be careful to not damage igniter**.
- Remove burner chamber & burner, then remove burner ring from burner (as its not needed for LP).
- Remove natural gas valve and replace with LP gas valve. Install LP rating plate and conversion labels.
- Reinstall all other parts. Check gas pressure at gas valve and check for leaks, then check flame quality.
- Keep natural gas valve & burner ring (with screws) in case dryer is converted back to natural gas.

All screws T-20

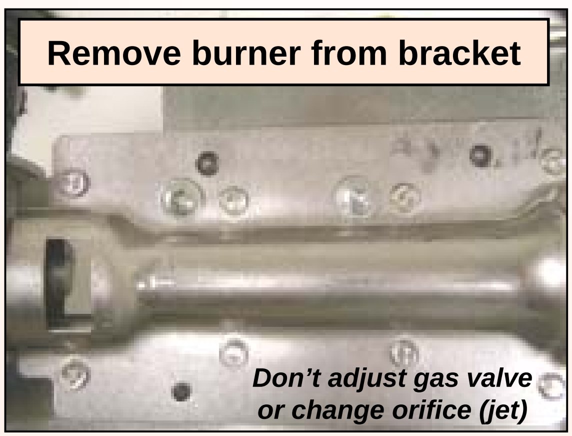




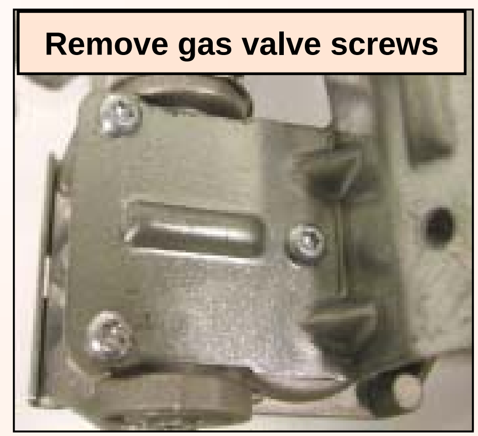






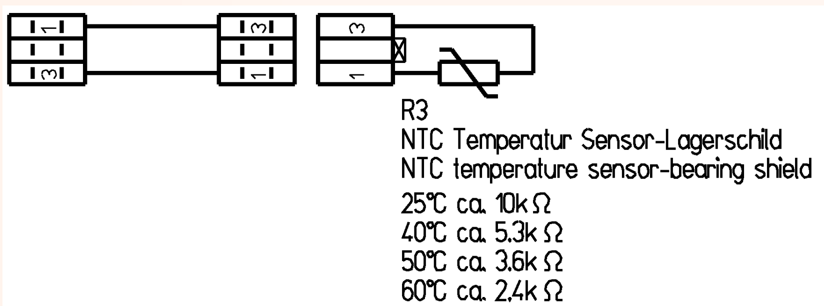


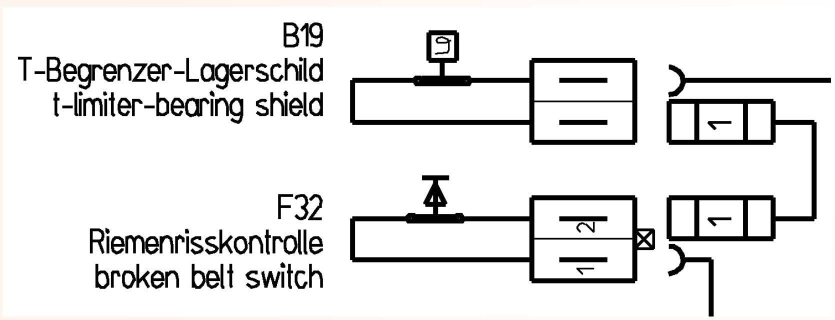




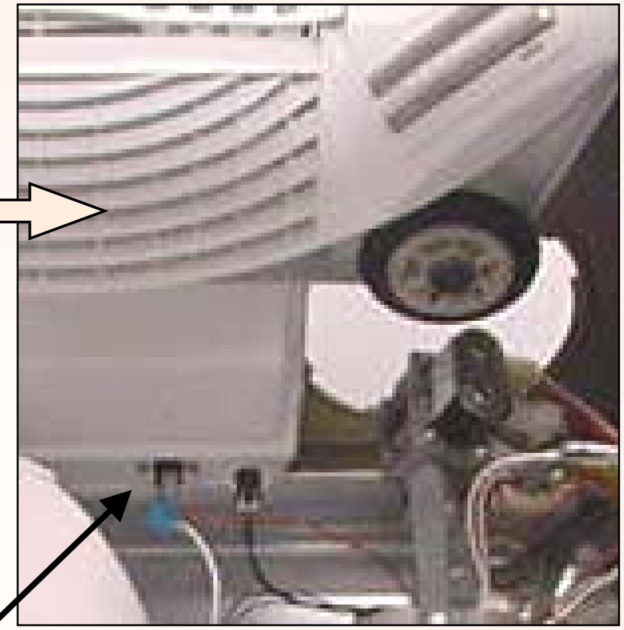
WTMC/WTXD Service Tips – Sensors below Lint Screen

There are two sensors located on the front shield under the lint screen – the R3 NTC & B19 Hi-limit (temperature limiter).

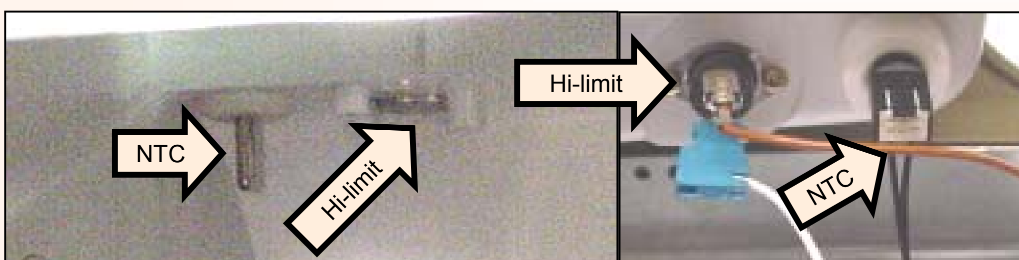




HINT: Make sure customers clean lint from front shield grid to provide proper air flow.



NOTE: B19 Hi-limit (temperature limiter) opens at 194ºF (90ºC).



NTC R3 & B19 Hi-limit in bottom of front shield

NOTE: Fault codes E:01, E:11 & E:12 occur when lint screens are clogged. Control module reads NTC and approximates air flow – when air flow is too low, fault codes are generated. B19 Hi-limits do not generate fault codes.

NOTE: B19 Hi-limit (temperature limiter) is a one-time fuse type and must be replaced when it has opened.

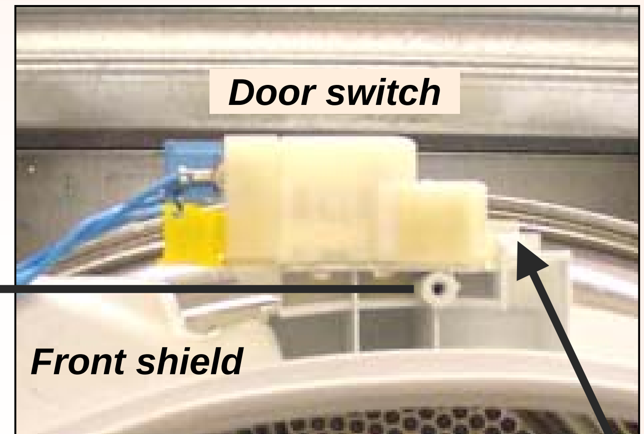
BOSCH / SIEMENS

WTMC/WTXD Service Tips – Door Pin Alignment

The door switch is operated by a door pin on the inner door. If the door pin isn't properly aligned with the dryer frame, the door pin can break or the door switch won't be activated, preventing the dryer from operating. A T-20 Torx screw can be tightened to properly align the door pin with the front bearing shield (and door switch).



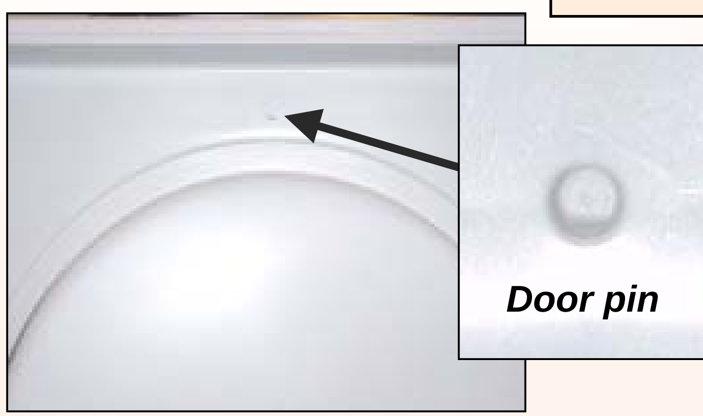




HINT: If necessary to remove door switch, push onto latches (at both ends) and slide switch toward rear of front shield.

HINT: If the dryer won't operate, check to see if the door switch is being activated by the door pin.

NOTE: There are no adjustments to the door switch -- it isn't held to the front shield with screws.

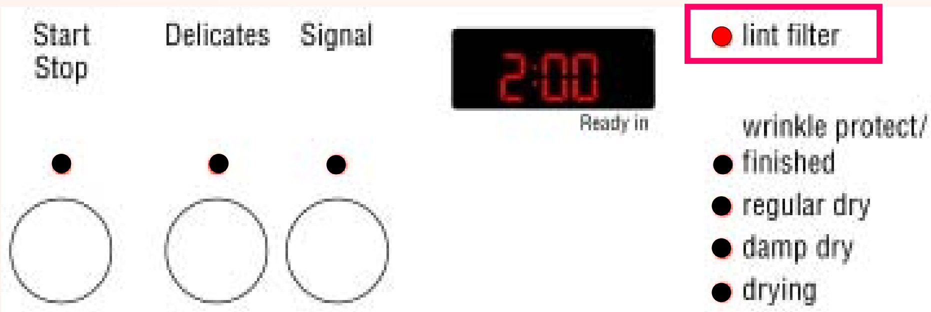


NOTE: Check door alignment as well. If needed, adjust door hinges.

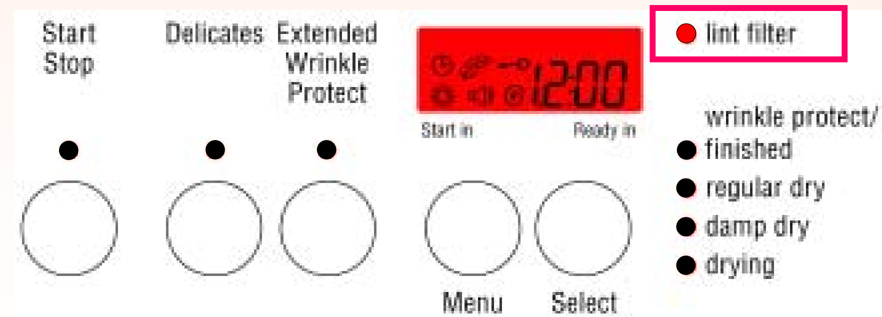
NOTE:
- If door pin has broken, replace entire door.
- Check door pin before initial installation.

WTMC/WTXD Service Tips – Lint Filter Light

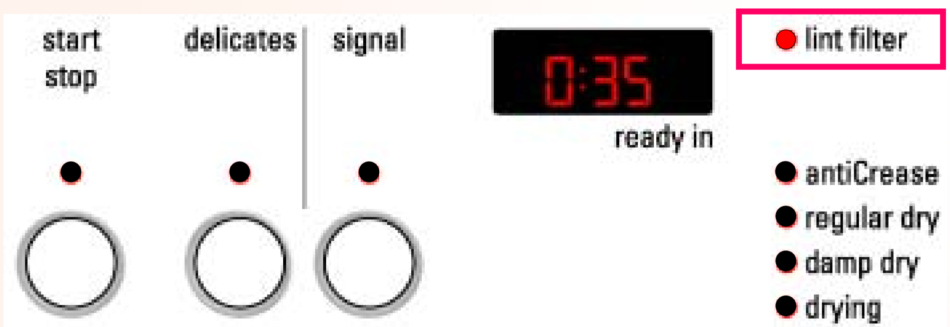
If the ***lint filter*** light comes on unexpectedly, especially during a drying cycle, then the lint screen NTC is reading a higher than normal temperature. It can be caused by debris in the bearing shield, such as lint or other debris, or occasionally by loose NTC terminal connections.



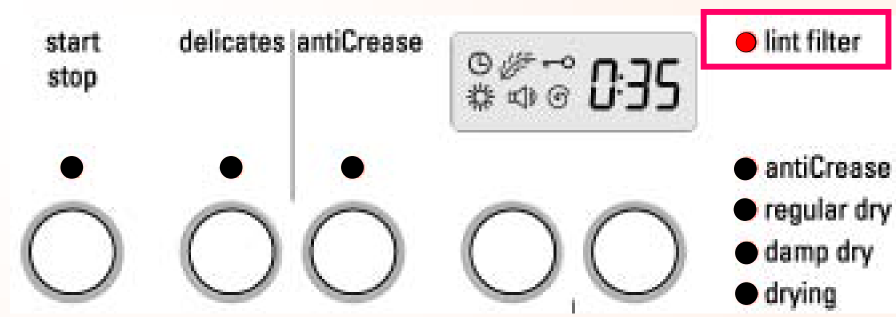
WTMC33 (Electric)



WTMC63 (Electric) / WTMC65 (Gas)



WTXD53 (Electric)



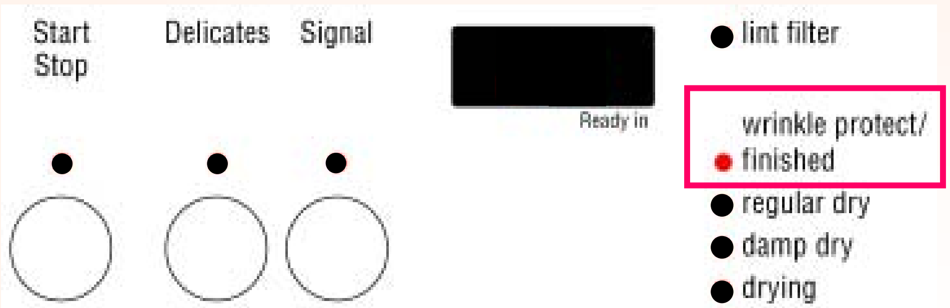
WTXD83 (Electric) / WTXD85 (Gas)

<u>**NOTE**</u>**:** To keep the ***lint filter*** light from coming on unexpectedly:

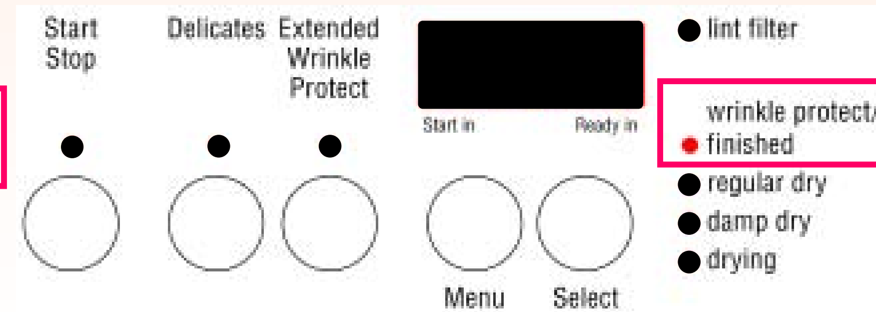
ⓘ Remove lint filter, then check bottom of bearing shield for lint or other debris. Clean area of debris.
ⓘ Check lint filter NTC terminal connections. Tighten them if loose.
ⓘ Clean lint filter if dirty.
ⓘ Check exhaust vent to see if its blocked, is too long or has too many elbows.

WTMC/WTXD Service Tips – Wrinkle/Finished Light

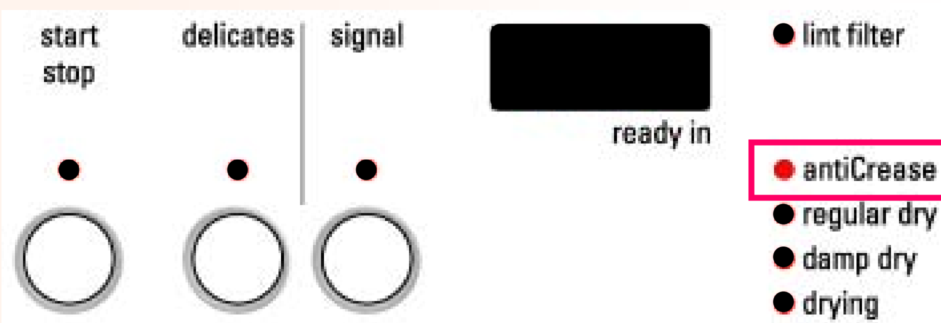
If the ***wrinkle protect/finished*** or ***antiCrease*** light is on while the display is off, an internal switch (S3) on the control board has been damaged and the entire control module has to be replaced.



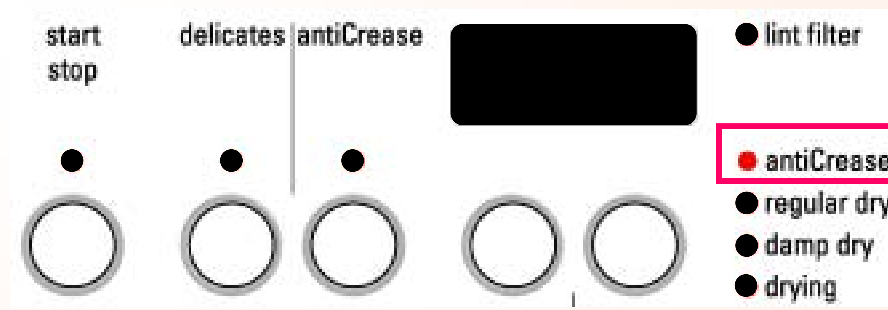
WTMC33 (Electric)



WTMC63 (Electric), WTMC65 (Gas)



WTXD53 (Electric)



WTXD83 (Electric) / WTXD85 (Gas)

NOTE: Display being off:

- **WTMC33 / WTXD53** dryers – display is blank (LED segments don't show)
- **WTMC63/65, WTXD83/85** dryers – ***red*** backlight will be off

NOTE: To confirm the control module has failed, rotate the ***cycle selector knob*** to ***Off***. If the ***wrinkle protect/finished*** or ***antiCrease*** light stays on while the display stays off, the module is damaged and must be replaced.

WTMC/WTXD Service Tips – Sales Demo Mode

Dryers can be shown on sales floors simply by turning on normal drying cycles.

NOTE: The test program has a Sales Demo showing typical displays during normal drying (LED's flash, then display counts down from :30 to :00). If using Sales Demo mode instead of turning on normal drying cycles, do the following:

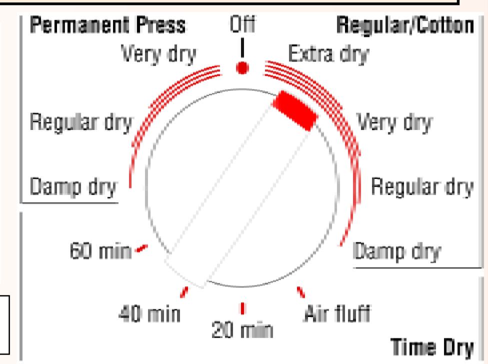
- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to to ***40 minute Time Dry*** (WTMC33/WTXD53) or ***Air Fluff*** (WTMC63/65, WTXD83/85).
- Push ***Start/Stop*** button to start or stop test. Don't rotate knob through ***Off*** to avoid exiting test program.
- Rotate ***cycle selector knob*** to end test.



WTMC3300



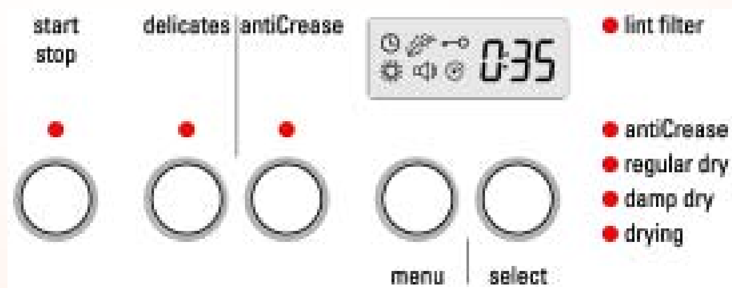
WTMC6300 (Electric) / WTMC6500 (Gas)



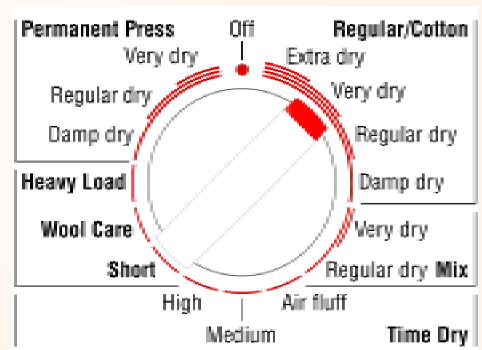
WTMC3300 (Electric)



WTXD53 (Electric)



WTXD83 (Electric) / WTXD85 (Gas)

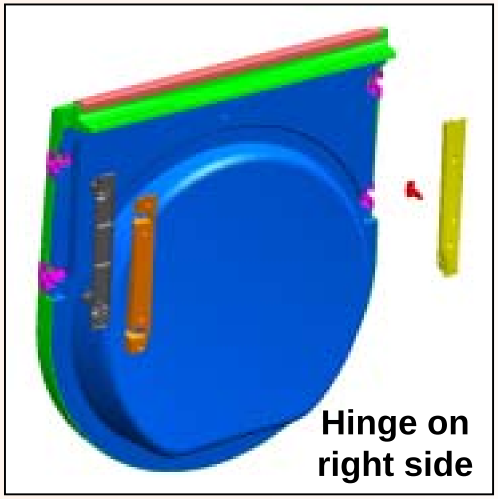


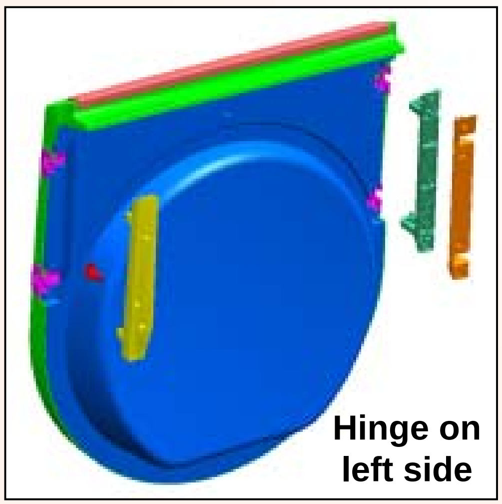
WTMC6300 (Electric) / WTMC6500 (Gas)

NOTE: Dryers have an ***empty drum detection*** feature – moisture sensors detect no clothes after 11 minutes (sensing no change in moisture levels), then dryers shut off. No fault codes are generated. Dryers can be promptly turned back on.

WTMC/WTXD Service Tips – Reversing Door Kit

Using door hinge kit (sales accessory **WTZ1260** or **WZ20360**), doors can be reversed to open on the left side (hinge left).


Hinge on right side


Hinge on left side

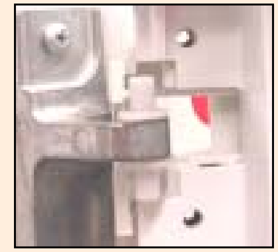


Changing door hinge cover


Changing door hinge


Changing door latch

NOTE: Occasionally door hinge white plastic bushings can fall off. Make sure all four are collected when removing hinges.







HINT: Kit includes instructions & all parts, including red & white strips for door (showing door "handle" location" & covers for unused openings. Remove red & white strips (to exchange positions) by squeezing them from behind.

HINT: To remove door, open it 180º (so it doesn't fall off), remove hinge cover and lift door off hinge.

NOTE: Kits **WTZ1260** & **WZ20360** can only be obtained through new equipment dealers, not through service parts distributors.

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WTMC/WTXD Service Tips – Side Vent Kit Cutting Tool

When installing dryer side vent kit (sales accessory **WTZ1265** or **WZ20365**), cutting tool kit (sales accessory **WTZ1310** or **WZ20410** or service part # **462498**) & other tools are also necessary.

Tools required:

- 1-7/16" wrench or socket with long handled breaker bar or ratchet wrench.
- 1" hole drill with (3/8") pilot bit, suitable for metal.
- Drill bit (3/8" suggested) for hole drill pilot hole.
- Awl or punch, with hammer.

Cutting 4" exhaust duct hole in side panel:

- 1) Using paper template from side vent kit, locate pilot hole on side panel.
- 2) Using punch/awl & hammer, mark center of pilot hole so drill bit won't skip.
- 3) Using 3/8" drill bit, drill pilot hole in side panel.
- 4) Using 1" hole saw (with 3/8" pilot bit), carefully cut 1" pilot hole – taking care to prevent saw from seizing when bit or saw breaks through side panel.
- 5) Assemble cutting tool with cutter and bolt outside dryer, threaded base inside dryer & bolt through 1" pilot hole.
- 6) Using 1-7/16" wrench or socket with breaker bar (or long ratchet wrench), tighten bolt onto cutting tool (by pushing down on wrench) until tool cuts through side panel.
- 7) Carefully tap tool out from hole, then unscrew tool and remove panel cutout from tool.


Cutting tool & hole saw


Marking center of pilot hole


Drilling pilot hole

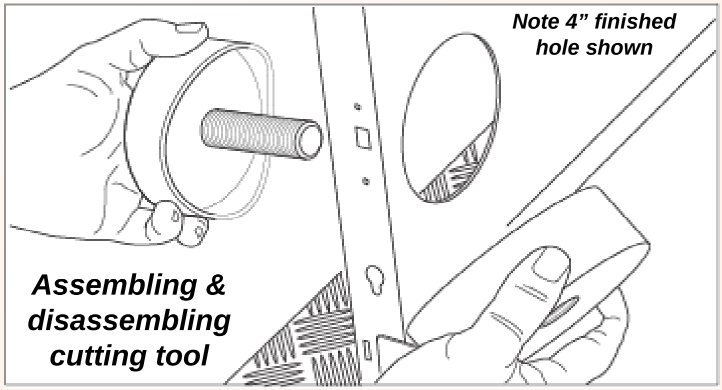

1" pilot hole


Assembling cutting tool


Using cutting tool

NOTE: Since dryers are relatively lightweight (with drums removed), push down on wrenches to prevent lifting up dryers or dragging dryers across floors.

NOTE: Side vent kits **WTZ1265 & WZ2036**5 can only be obtained through new equipment dealers, not through service parts distributors.



Assembling & disassembling cutting tool

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WTMC/WTXD Service Tips – Troubleshooting

Problem	Possible Causes	Suggested Repairs
Dryer won't run	Power not on or has been disconnected.	Reconnect and turn on power.
	Door switch misaligned & doesn't get activated by door pin.	Tighten screw (where door pin engages door switch) to realign front shield with door. Do not overtighten screw.
	Door pin broken, so door switch doesn't get activated.	Replace entire door.
	Control module failed.	Check control module output voltages. Replace module if faulty.
	Door switch or wire harness failed.	Check door switch & wire harness resistances. Replace faulty part.
Heater / burner won't work	Motor overheated.	Wait for motor to cool down and thermal protector to reset.
	Broken belt switch tripped.	Reset broken belt switch.
	Motor control or motor failed.	Check motor control voltage & motor resistance. Replace faulty part.
	Lint screen hi-limit (thermal cutout) tripped.	Clean lint screen and clean lint and other debris from front shield, then replace hi-limit. Also check exhaust duct length & # of elbows.
	Heating element (electric dryers) or gas valve / igniter (gas dryer) failed.	Check voltages to and resistances of parts. Replace faulty parts.
	Heater / burner hi-limit (thermal cutout)	Correct what caused overheating, then reset hi-limit.
	Wire harness failed.	Run resistance or continuity checks to track down broken wire or connector. Replace failed wire harness.
Motor won't work	Motor overheated.	Wait for motor to cool down and thermal protector to reset.
	Broken belt switch tripped.	Reset broken belt switch.
	Motor control or motor failed.	Check motor control voltage & motor resistance. Replace faulty part.
	Lint screen hi-limit (thermal cutout) tripped.	Clean lint screen and clean lint and other debris from front shield, then replace hi-limit. Also check exhaust duct length & # of elbows.
	Wire harness failed.	Run resistance or continuity checks to track down broken wire or connector. Replace failed wire harness.

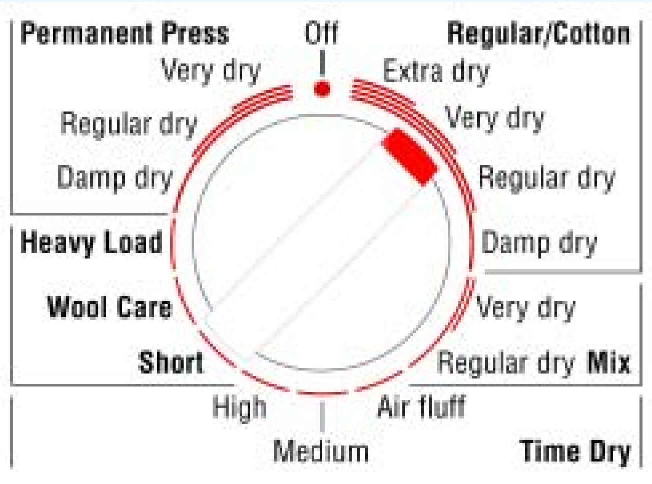
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WTMC/WTXD Service Tips – Test Pgm (1): Selecting Tests

Selecting WTMC / WTXD Dryer Tests			
Test	***Position on knob***	***WTMC33/WTXD53***	***WTMC63/65, WTXD83/85***
View fault codes	1st position on right (cw)	*Extra Dry (Reg./Cot.)*	*Extra Dry (Reg./Cot.)*
Safety test	2nd position on right (cw)	*Very Dry (Reg./Cot.)*	*Very Dry (Reg./Cot.)*
Display test (LED's/LCD's)	3rd position on right (cw)	*Regular Dry (Reg./Cot.)*	*Regular Dry (Reg./Cot.)*
Control elements test	4th position on right (cw)	*Damp Dry (Reg./Cot.)*	*Damp Dry (Reg./Cot.)*
Consumer test	5th position on right (cw)	*Air Fluff*	*Very Dry (Mix)*
Moisture sensor resistance measurement	6th position on right (cw)	*20 min. Time Dry*	*Regular Dry (Mix)*
Sales demo program	7th position on right (cw)	*40 min. Time Dry*	*Air Fluff*
240V:208V changeover	8th position on right (cw)	*60 min. Time Dry*	*Medium Time Dry*
Automatic end-of-tape program	1st position on left (ccw)	*Very Dry (Perm. Press)*	*Very Dry (Perm. Press)*



WTMC33 / WTXD53 (Electric)



WTMC63/WTXD83 (Electric), WTMC65/WTXD85 (Gas)

HINT: Electric dryers can be run on 240V **or** 208V. To change voltage from 240V to 208V, use voltage changeover test (8th position from right).

HINT: To run dryers in sales demo mode, use sales demo program (7th position from right).

ENTERING TEST PROGRAM: While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to desired position above.

WTMC/WTXD Service Tips – Test Program (2): Starting

To enter/exit test program for WTMC/WTXD dryers:

- Rotate ***cycle selector knob*** to ***Off*** position.
- Push and hold ***Start/Stop*** and ***Delicates*** buttons at the same time, then turn dryer on by rotating ***cycle selector knob*** either direction -- keep holding ***Start/Stop*** and ***Delicates*** buttons until ***Start/Stop*** light flashes rapidly. Dryer is now in the test program.
- *When test program has been entered*:
  - ***Start/Stop*** light flashes rapidly.
  - Select individual parts to test by rotating ***cycle selector knob*** as shown on previous page.
  - Once test has been selected, start test by pushing ***Start/Stop*** button. ***Start/Stop*** light will stay on continually while tests are running. Push ***Start/Stop*** button again to end any test – rotating ***cycle selector knob*** stops all tests except ***Control Elements*** test. Tests have finished once ***Start/Stop*** light flashes rapidly again.
  - To exit test program, rotate ***cycle selector knob*** to ***Off*** position.



WTMC63/WTXD83 (Electric), WTMC65/WTXD85 (Gas)

WTXD dryers have ***antiCrease*** light instead of ***wrinkle protect/finished*** light.

HINT: Electric dryers can be run on 240V **or** 208V. To change voltage from 240V to 208V, use voltage changeover test (8th position from right).

HINT: To run dryers in sales demo mode, use sales demo program (7th position from right).

NOTE: When test program is initially entered, last fault code will show. Display will be cleared once any test is started.

WTMC/WTXD Service Tips – Test Program (3): Displays

WTMC / WTXD Dryer Test Program Displays				
Test	***Knob Position***	***WTMC33/WTXD53***	***WTMC63/65, WTXD83/85***	***Notes***
View fault codes	**1st position on right (cw)**	See fault codes (4)	See fault codes (4)	Run this test every time.
Safety test	2nd position on right (cw)			Not for U.S. -- for testing for power in circuits with neutral. Runs drum motor & applies power to one side of heater.
Display test (LED's/LCD's)	**3rd position on right (cw)**	All lights/display digits turn on, then cycles through lights.	All lights/display digits turn on, then cycles through lights.	Tests if (LCD) text displays & (LED) lights/displays work OK.
Control elements test	**4th position on right (cw)**			Tests ***cycle selector knob*** and pushbuttons. Can't end test using ***cycle selector knob***, only by ***Start/Stop*** button.
Consumer test	**5th position on right (cw)**	Fan runs & display counts from ***:01 - :04***, then test ends.	Fan runs & display counts from ***:01 - :04***, then test ends.	Turns heater & motor on so current can be measured. Motor runs during steps ***:02 - :04***, while heater runs only during step ***:03***.
Moisture sensor resistance measurement	**6th position on right (cw)**	***Drying*** & ***Start/Stop*** lights on when drum empty.	***Drying*** & ***Start/Stop*** lights on when drum empty.	Designed for using with variable resistance board, but can test with fixed resistances.
Sales demo program	7th position on right (cw)	LED's flash, then display counts down from ***:30 - :00*** -- test repeats itself.	LED's flash, then display counts down from ***:30 - :00*** -- test repeats itself.	Simulates typical displays during normal drying. Program runs 82 seconds (1 minute, 22 seconds), then repeats.
240V:208V changeover	**8th position on right (cw)**	***240V*** or ***208V*** on display	***240V*** or ***208V*** on display	Push ***Delicates*** button to change voltage -- display flashes when voltage changed. Appears on gas dryers, but isn't used.
Automatic end-of-tape program	1st position on left (ccw)	***Finished / antiCrease*** light flashes -- can't exit test ; must turn dryer off to exit test program.	***Finished / antiCrease*** light flashes -- can't exit test ; must turn dryer off to exit test program.	Only for production -- do **<u>not</u>** use.

WTMC/WTXD Service Tips – Test Pgm (4A): Fault Codes

WTMC / WTXD Dryer Test Program Fault Codes

Fault Code	***Fault***	***Solution***	***Notes***	***Effect***
E:11	Overheating due to clogged lint filter.	Clean lint filter (& air duct if necessary).	Displays **E:01** during normal use. Measures reduced air flow.	
E:12	Severe overheating due to clogged lint filter.	Clean lint filter (& air duct if necessary).	Displays **E:01** during normal use. Measures reduced air flow.	
E:13	Maximum drying time exceeded	Check heater, control module, NTC's & Hi-limit's. Usually faulty heater. Can also be overloaded dryer.	Stops & displays **E:03** during normal use (after maximum drying time limit of 240 minutes).	
E:17	NTC error (NTC R3 @ lint screen)	Check NTC R3 & wire harness. Replace faulty part.	Typically shorted or opened wire harness.	Dryer stops & can't be restarted.
E:18	NTC error (NTC R2 @ heater)	Check NTC R2 & wire harness. Replace faulty part.	Typically shorted or opened wire harness.	Dryer stops & can't be restarted.
E:20	EEPROM error	Replace faulty control module.		Dryer stops & can't be restarted.
E:21	Incorrect checksum	Replace faulty control module.		Dryer stops & can't be restarted.
E:22	Invalid update	Replace faulty control module.		Dryer stops & can't be restarted.

NOTE: To run fault codes test to display fault codes:

- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to ***Extra Dry – Regular/Cotton***.
- Push ***Start/Stop*** button to start test. Push ***Start/Stop*** button to scroll through fault codes (if more than one exist). Do not rotate knob through ***Off*** to avoid exiting test program.
- Rotate ***cycle selector knob*** to end test.

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WTMC/WTXD Service Tips – Test Pgm (4B): Fault Codes

WTMC / WTXD Dryer Test Program Fault Codes

Fault Code	*Fault*	*Solution*	*Notes*	*Effect*
E:23	Model variant doesn't match table	Replace faulty control module.		Dryer stops & can't be restarted.
E:24	Software version doesn't match table	Replace faulty control module.		Dryer stops & can't be restarted.
E:25	Damaged data table	Replace faulty control module.		Dryer stops & can't be restarted.
E:26	Control error	Replace faulty control module.		

NOTE: Fault displayed alternates with # of times fault occurred every two (2) seconds. If there's no faults, displays will be blank.

- E:xx = fault code from E11 – E39 (e.g. E:11)
- C:xx = # of occurrences (e.g. C:01)

NOTE: When test program is initially entered, last fault code will show. Display will be cleared once any test is started.

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WTMC Service Tips – Test Program (5A): Controls

NOTE: To run control elements test to check buttons and knob:

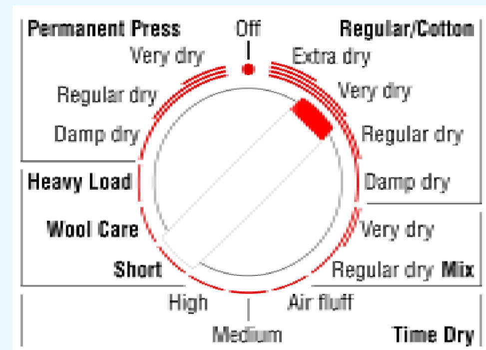
- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to ***Damp Dry – Regular/Cotton***.
- Push ***Start/Stop*** button to start test. Push buttons one at a time to check button operation – when each button is pushed, its light will come on. Rotate ***cycle selector knob*** through all positions to check knob operation (see chart below). Do not rotate knob through ***Off*** to avoid exiting test program.
- Push ***Start/Stop*** button to end test.

WTMC33 Knob	WTMC63/65 Knob	Lights			
Extra Dry (Reg./Cot.)	*Extra Dry (Reg./Cot.)*	*Drying*			
Very Dry (Reg./Cot.)	*Very Dry (Reg./Cot.)*		*Damp Dry*		
Regular Dry (Reg./Cot.)	*Regular Dry (Reg./Cot.)*	*Drying*	*Damp Dry*		
Damp Dry (Reg./Cot.)	*Damp Dry (Reg./Cot.)*			*Regular Dry*	
Air Fluff	*Very Dry (Mix)*	*Drying*		*Regular Dry*	
20 Minute Time Dry	*Regular Dry (Mix)*		*Damp Dry*	*Regular Dry*	
40 Minute Time Dry	*Air Fluff*	*Drying*	*Damp Dry*	*Regular Dry*	
60 Minute Time Dry	*Medium Time Dry*				*Finished*
Damp Dry (Perm. Press)	*High Time Dry*	*Drying*			*Finished*
Regular Dry (Perm. Press)	*Short*		*Damp Dry*		*Finished*
Very Dry (Perm. Press)	*Wool Care*	*Drying*	*Damp Dry*		*Finished*
	Heavy Load			*Regular Dry*	*Finished*
	Damp Dry (Perm. Press)	*Drying*		*Regular Dry*	*Finished*
	Regular Dry (Perm. Press)		*Damp Dry*	*Regular Dry*	*Finished*
	Very Dry (Perm. Press)	*Drying*	*Damp Dry*	*Regular Dry*	*Finished*

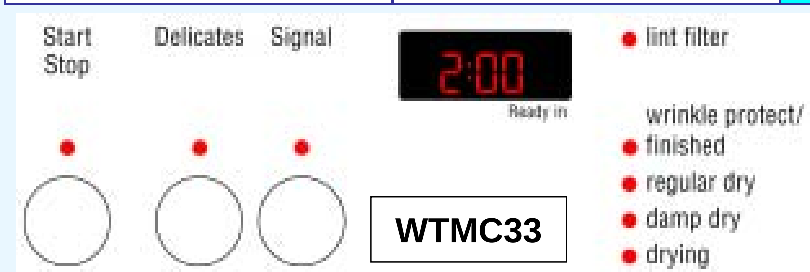
NOTE: ***Lint filter*** light doesn't come on.



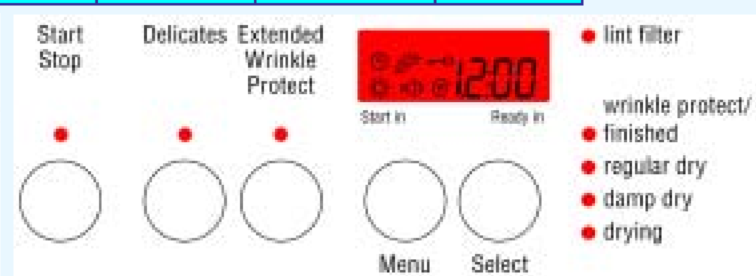
WTMC33 (Electric)



WTMC63 (Electric) / WTMC65 (Gas)



WTMC33



WTMC63 (Electric) / WTMC65 (Gas)

SIEMENS

WTXD Service Tips – Test Program (5B): Controls

NOTE: To run control elements test to check buttons and knob:

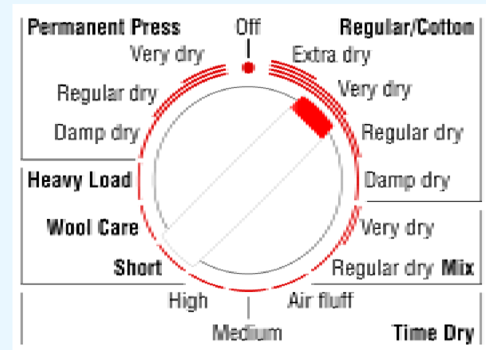
- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to ***Damp Dry – Regular/Cotton***.
- Push ***Start/Stop*** button to start test. Push buttons one at a time to check button operation – when each button is pushed, its light will come on. Rotate ***cycle selector knob*** through all positions to check knob operation (see chart below). Do not rotate knob through ***Off*** to avoid exiting test program.
- Push ***Start/Stop*** button to end test.

WTXD53 Knob	WTXD83/85 Knob	Lights			
Extra Dry (Reg./Cot.)	*Extra Dry (Reg./Cot.)*	*Drying*			
Very Dry (Reg./Cot.)	*Very Dry (Reg./Cot.)*		*Damp Dry*		
Regular Dry (Reg./Cot.)	*Regular Dry (Reg./Cot.)*	*Drying*	*Damp Dry*		
Damp Dry (Reg./Cot.)	*Damp Dry (Reg./Cot.)*			*Regular Dry*	
Air Fluff	*Very Dry (Mix)*	*Drying*		*Regular Dry*	
20 Minute Time Dry	*Regular Dry (Mix)*		*Damp Dry*	*Regular Dry*	
40 Minute Time Dry	*Air Fluff*	*Drying*	*Damp Dry*	*Regular Dry*	
60 Minute Time Dry	*Medium Time Dry*				*antiCrease*
Damp Dry (Perm. Press)	*High Time Dry*	*Drying*			*antiCrease*
Regular Dry (Perm. Press)	*Short*		*Damp Dry*		*antiCrease*
Very Dry (Perm. Press)	*Wool Care*	*Drying*	*Damp Dry*		*antiCrease*
	Heavy Load			*Regular Dry*	*antiCrease*
	Damp Dry (Perm. Press)	*Drying*		*Regular Dry*	*antiCrease*
	Regular Dry (Perm. Press)		*Damp Dry*	*Regular Dry*	*antiCrease*
	Very Dry (Perm. Press)	*Drying*	*Damp Dry*	*Regular Dry*	*antiCrease*

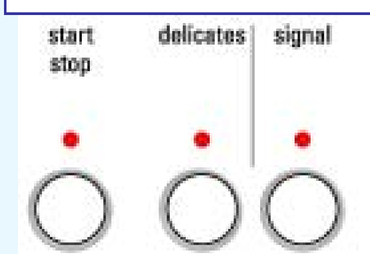
NOTE: ***Lint filter*** light doesn't come on.



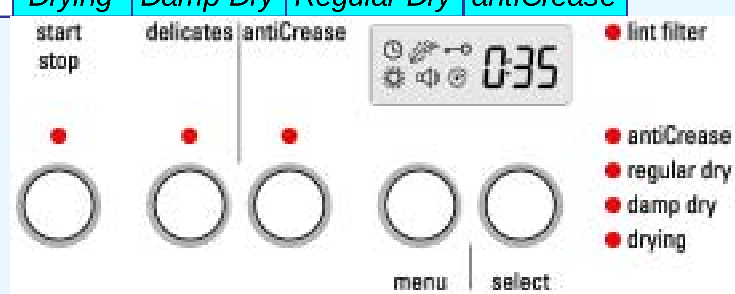
WTXD53 (Electric)



WTXD83 (Electric) / WTXD85 (Gas)



WTXD53

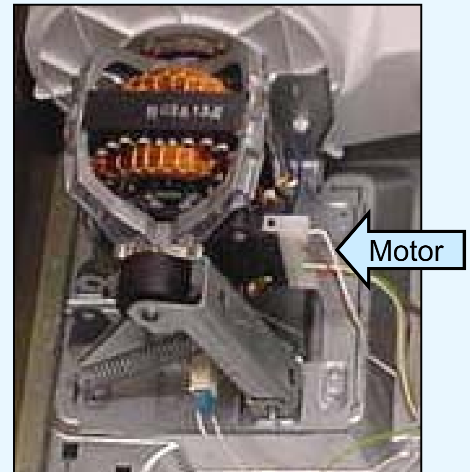


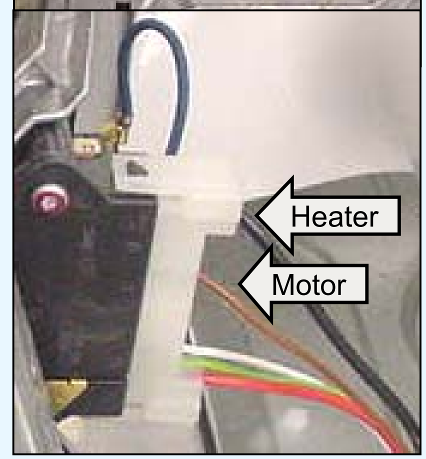
WTXD83 (Electric) / WTXD85 (Gas)

WTMC/WTXD Service Tips – Test Program (6): Amp Draw

NOTE: To run consumer test to measure heater and motor current:

- Disconnect electric power. Remove rear cover, making sure no electrical shorts or shock will occur (once power is reconnected).
- Locate motor & heater wire harnesses and place current clamp of meter around harness to be measured. Reconnect electric power.
- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to ***Air Fluff*** (WTMC33 / WTXD53) or ***Very Dry – Mix*** (WTMC63/65, WTXD83/85).
- Push ***Start/Stop*** button to start test. Measure motor current when display shows ***:02***, ***:03*** or ***:04*** and measure heater current when display shows ***:03***.
- Push ***Start/Stop*** button or rotate ***cycle selector knob*** to any position to end test.





NOTE: For consumer test, heater and motor run as follows:

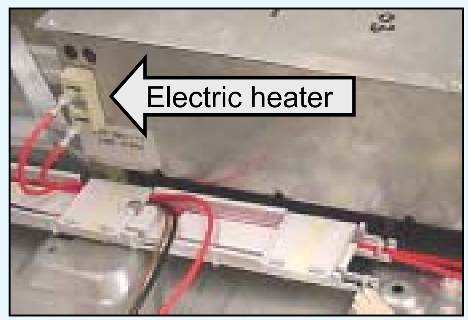
:01 = both off (5 seconds).

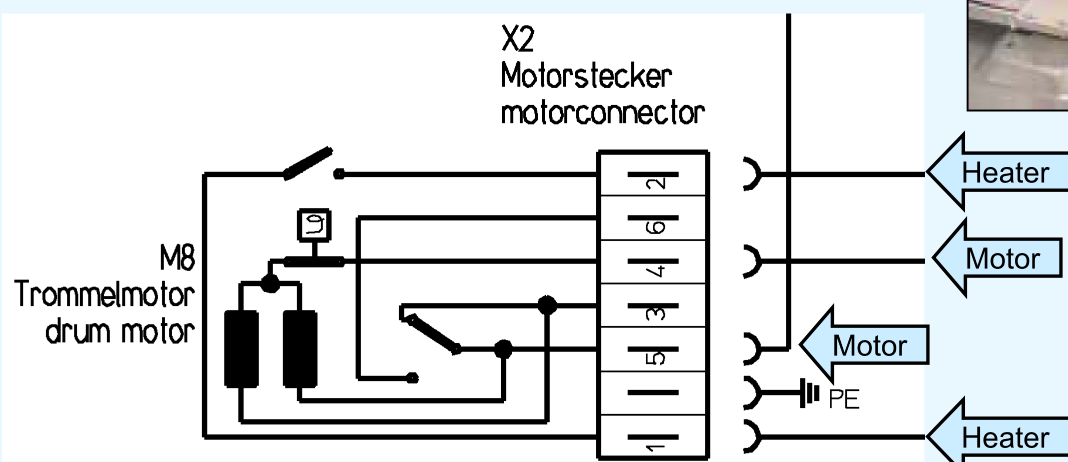
:02 = motor on/heater off (10 seconds)

:03 = both on (60 seconds)

:04 = motor on/heater off (30 seconds)

Can only measure heater current during step **:03**.





HINT: Choosing wires to measure current from:

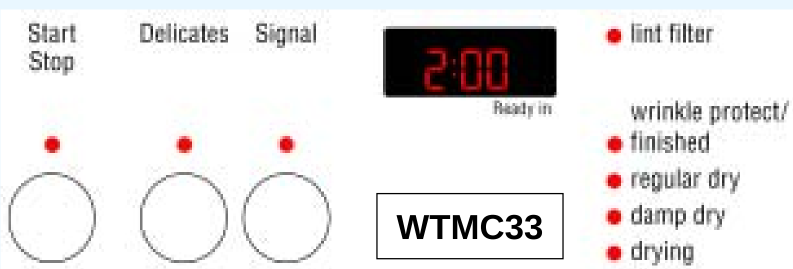
- **Drum motor** = either wire to terminal 4 or 5 on motor.
- **Heater** = either red wire to heater (optional: can measure wire to either terminal 1 or 2 on motor).

WTMC/WTXD Service Tips – Test Program (7): Moisture Sensor Conductance

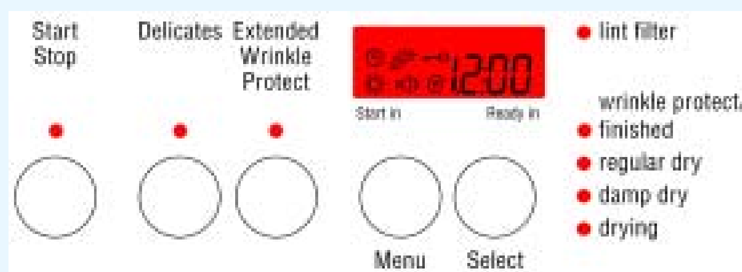
NOTE: To run sensor moisture conductance test:

- Disconnect electric power. Remove rear cover, making sure no electrical shorts or shock will occur (once power is reconnected). If necessary for access, remove drum.
- Locate moisture sensor at front of dryer. Reconnect electric power.
- While pushing & holding ***Start/Stop*** & ***Delicates*** buttons, rotate ***cycle selector knob*** to ***20 minute Time Dry*** (WTMC33 / WTXD53) or ***Regular Dry – Mix*** (WTMC63/65, WTXD83/85).
- Push ***Start/Stop*** button to start test. Control module measures resistance and lights come on to show test results as shown in the table below.
- Push ***Start/Stop*** button or rotate ***cycle selector knob*** to any position to end test.

Test	***Drying*** Light	***Damp Dry*** Light	Faults Shown	Resistance Range
Drum empty -- conductance electrodes open	*Off*	*Off*	Circuit shunted.	
	Drying	*Off*	None	>7.5 MΩ
		Damp Dry	Short or shunted circuit.	<33.9 kΩ
Interrupting conductance electrodes with a hand or resistance (~ 100kΩ - 1 MΩ)	*Off*	*Off*	None	
	Drying	*Off*	Interruption or resistance too high.	>7.5 MΩ
	Off	***Damp Dry***	Short or shunted circuit.	<33.9 kΩ
Shorting conductance electrodes	*Off*	*Off*	Interruption or resistance too high.	
	Drying	*Off*	Interruption or resistance too high.	>7.5 MΩ
	Off	***Damp Dry***	None	<33.9 kΩ



WTMC33



WTXD dryers have ***antiCrease*** light instead of ***wrinkle protect/finished*** light.

WTMC63 (Electric) / WTMC65 (Gas)

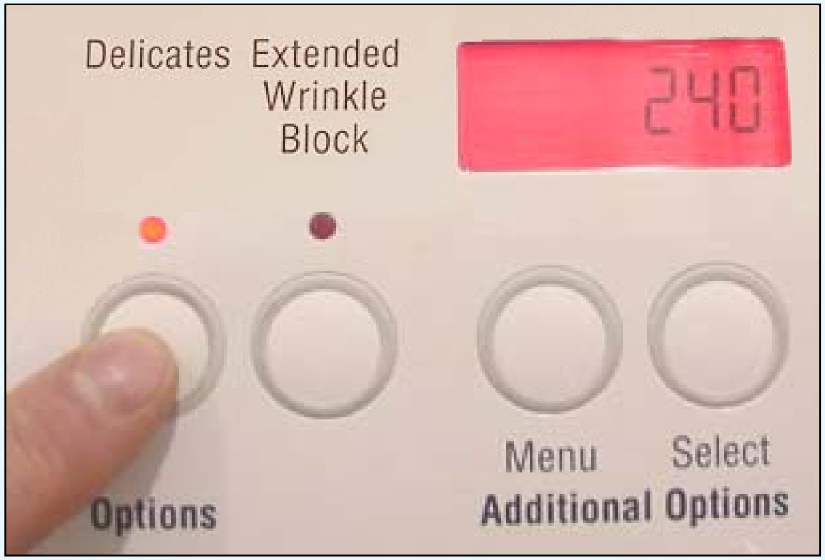
BOSCH / SIEMENS

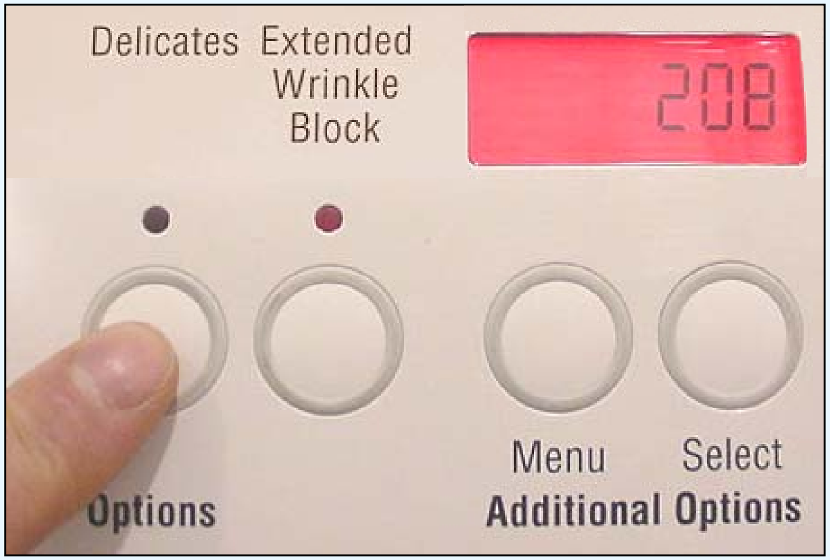
WTMC/WTXD Service Tips – Test Program (8):

Changing WTMC33/63, WTXD53/83 Electric Dryer Voltage

NOTE: To check or change WTMC33/63 & WTXD53/83 electric dryer voltages (from 240V to 208V):

- While pushing & holding **Start/Stop** & **Delicates** buttons, rotate **cycle selector knob** to **60 minute Time Dry** (WTMC33/WTXD53) or **Medium Time Dry** (WTMC63/WTXD83).
- Push **Start/Stop** button to start test.
- Push **Delicates** button to change voltage (from 240V to 208V or from 208V to 240V).
- Push **Start/Stop** button or rotate **cycle selector knob** to **Off** to end test & store voltage setting.





WTMC63 dryer shown

WTMC/WTXD Service Tips – Troubleshooting of Minor Faults (Customer Self-Help 1)

SELF-HELP

Dryers may exhibit problems unrelated to a malfunction of the dryer itself. The following table contains questions customers can deal with without calling a serviceman.

Lint filters, exhaust ducts and moisture sensors should be cleaned according to the ***Cleaning and Care*** section in the ***Operating, Care and Installation Instructions***.

PROBLEM	POSSIBLE CAUSE
Start/Stop Indicator light doesn't come on.	• The ***cycle selector knob*** hasn't been rotated from ***Off*** position. • A fuse may have blown or a circuit breaker tripped. Replace fuse or reset circuit breaker at your fuse box/breaker box. • The plug is not correctly or only loosely inserted into the receptacle.
Dryer doesn't start.	• Cycle has not been selected. • "Start/Stop" button hasn't been depressed. • Door isn't closed properly. • Room temperature is below 32 ºF (0 ºC) • If necessary, switch the dryer off and wait 5 seconds before switching it on again. Select the cycle again and press ***Start/Stop*** button.
Cycle is interrupted and ***Lint Filter*** light is illuminated and buzzer sounds.	• Clean lint filter. If needed (when fabric softener has been used), wash gently with dish soap and water. • Check exhaust vent to see if it is blocked, too long or has too many elbows. • Remove lint filter, then check bottom of filter holder for lint or other debris. Remove debris. • Check NTC connections at lint screen. Tighten connections if loose.
Cycle is interrupted, buzzer sounds, one or several cycle indicators are flashing.	Indicates faulty operation: • Clean the lint filter and check the exhaust duct length. • Switch the dryer off, wait for it to cool down and then restart.
Drying level not reached or drying time too long.	• Clean moisture sensor. • If there is a power failure for an extended period (> 10 minutes), the cycle must be restarted.

WTMC/WTXD Service Tips – Troubleshooting of Minor Faults (Customer Self-Help 2)

PROBLEM	POSSIBLE CAUSE
The laundry is not dry even though the highest drying level has been selected.	• The drum is too full. • The laundry was too wet when placed in the dryer. • The room is not adequately ventilated. Make sure there is an adequate supply of fresh air. • The lint filter is blocked and should be cleaned. • The exhaust vent is blocked or too long.
Drum light does not work	• ***Cycle selector knob*** hasn't been rotated from the ***Off*** position. • Bulb has failed. For safety reasons the bulb must only be replaced by an authorized service agent.

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WTMC/WTXD Service Tips –

Dryer Operation (1): Moisture Sensing

The control module continually measures the conductivity of wet clothing (by measuring the voltage between the two sensors).

When the voltage matches the one required by the customer dryness setting, the dryer stops.



The new moisture sensor is located next to the lint screen and does **not** need any sliding contacts (brushes).

NOTE: Dryers have an ***empty drum detection*** feature – moisture sensors detect no clothes after 11 minutes (sensing no change in moisture levels), then dryers shut off. No fault codes are generated. Dryers can be promptly turned back on.

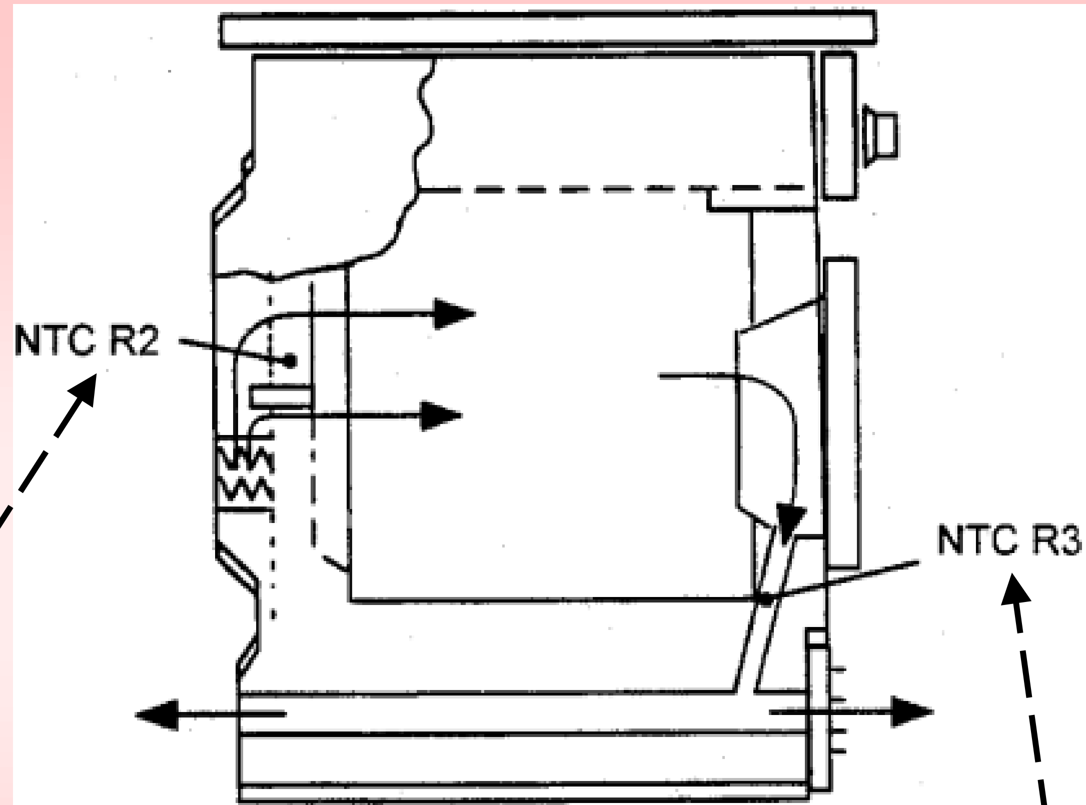
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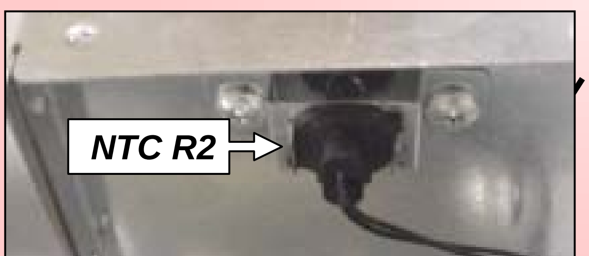
WTMC/WTXD Service Tips –

Dryer Operation (2): NTC Locations

Two NTC sensors measure the air temperature to prevent overheating.

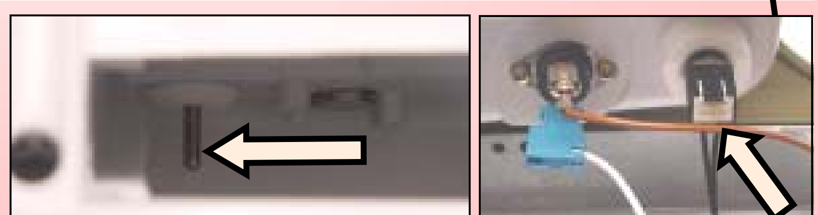
- **NTC R2 --** Measures the air temperature in front of the heater (electric) or burner (gas).
- **NTC R3 --** Measures the air temperature at the dryer door.





Rear of gas burner housing

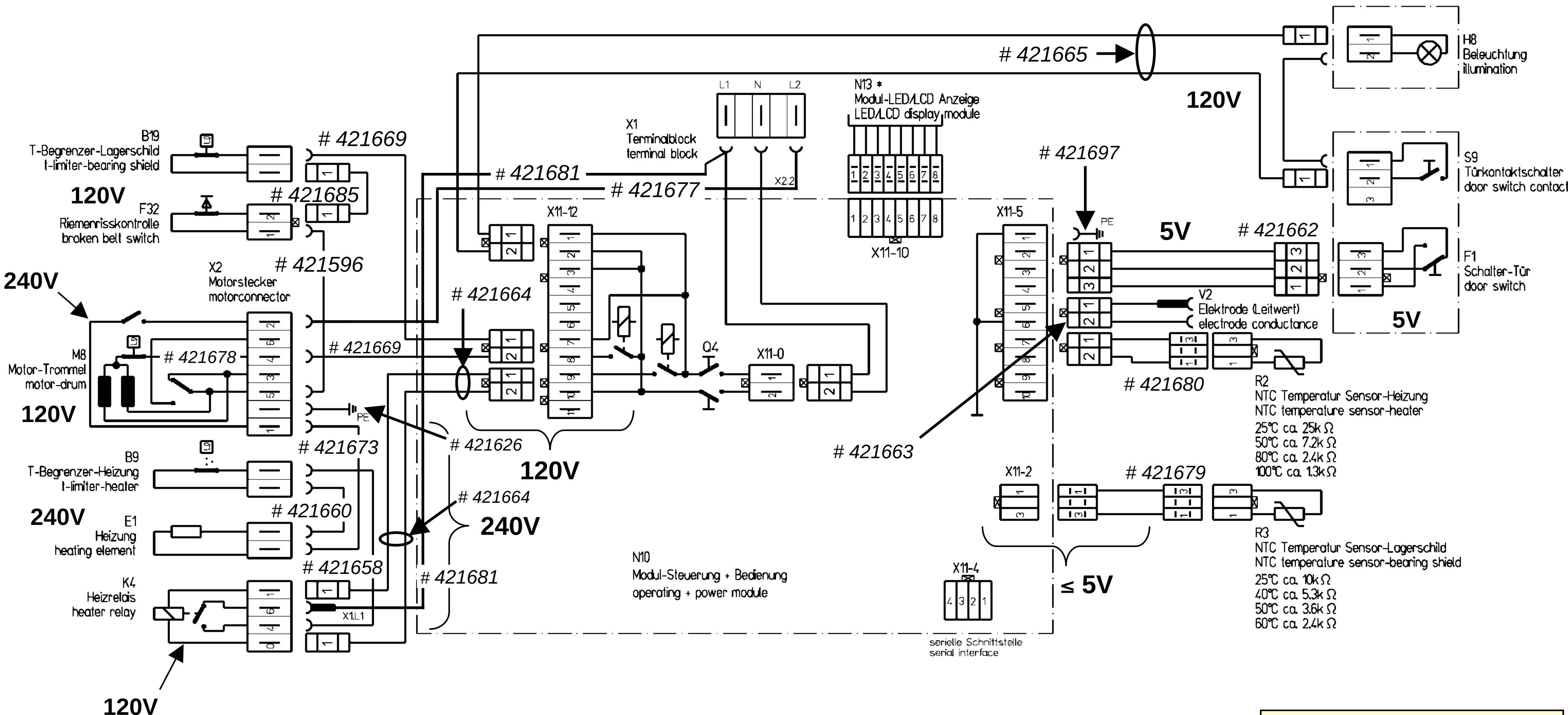
HINT: Keeping lint filter & vent hoses clean of lint will prevent most problems.



NTC R3 in bottom of front shield

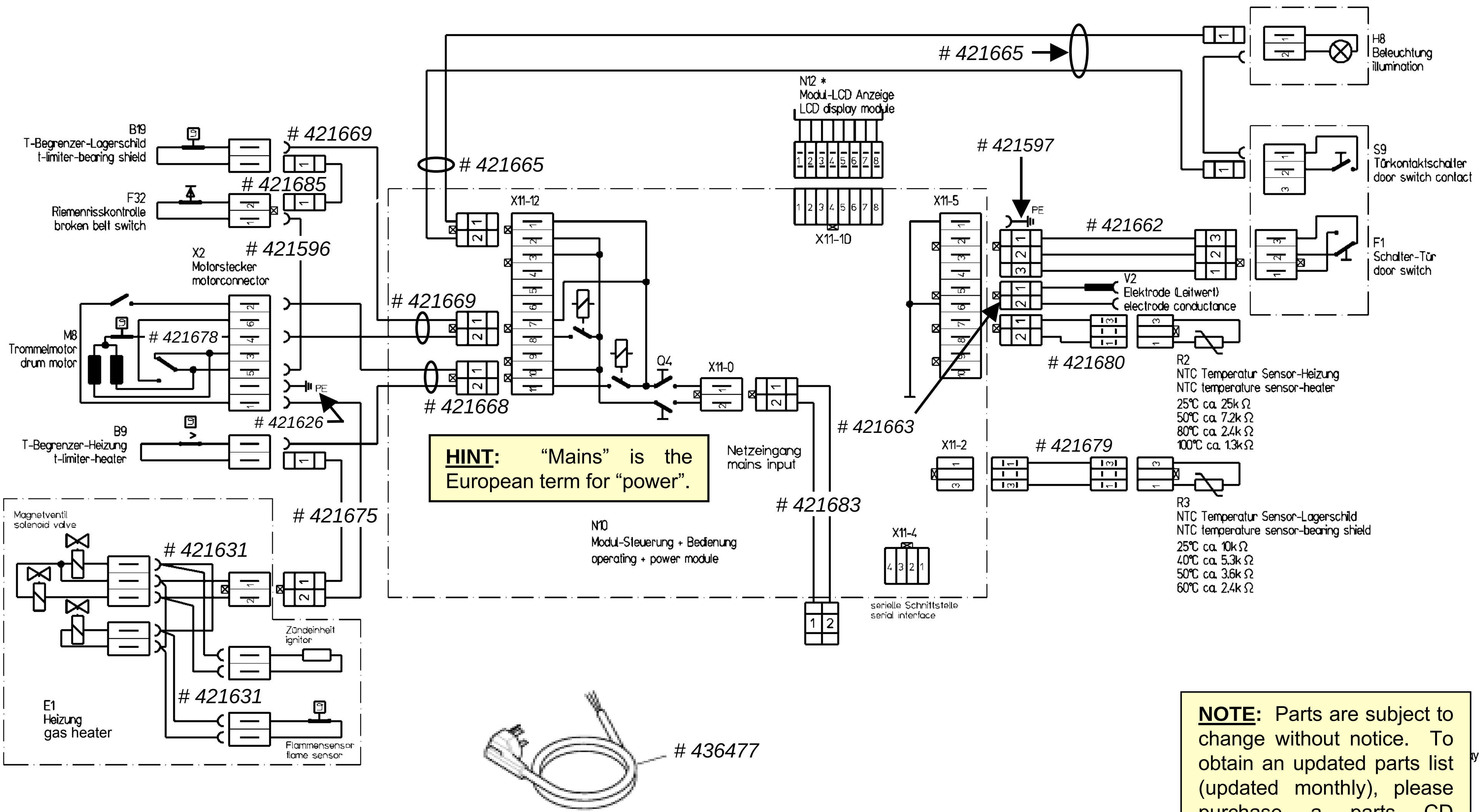
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WTMC33/63, WTXD5383 Electric Dryer Wire Harnesses (American/Canadian models)



NOTE: Parts are subject to change without notice. To obtain an updated parts list (updated monthly), please purchase a parts CD subscription.

WTMC65/WTXD85 Gas Dryer Wire Harnesses



HINT: "Mains" is the European term for "power".

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